# Depression and cancer

ancer is a life-threatening and dreaded illness. Its treatments can have direct organic effects on mood; interactions can occur between antidepressants and chemotherapy agents; and, as patients undergo cancer treatment, they may be debilitated, immunosuppressed, underweight and in pain for considerable periods of time. When active cancer treatment is complete, patients often have to adjust to changes in body function, persistent pain, alterations in role and sense of self, and the possibility of cancer recurrence. All these factors put patients with cancer at increased risk of depression, 1,2 which can have consequences including reduced quality of life,<sup>3,4</sup> greater risk of cancer mortality<sup>5</sup> and higher risk of suicide.<sup>6,7</sup> A particular challenge can be persuading a patient to accept treatment for depression at the same time as onerous cancer treatment. Early detection of depression and expeditious commencement of treatment can be difficult to achieve in the context of complex and busy cancer treatment protocols.

#### Mental health care in cancer

Although evidence shows that psychosocial interventions can effectively prevent poor mental health outcomes for many people diagnosed with cancer, the health system, faced with an ever-growing demand on cancer treatment programs, has yet to fully integrate the psychological and biological aspects of comprehensive cancer care. Psychooncology services remain largely reactive and referral-based at large treating centres in Australia, and are minimal or non-existent at smaller centres, despite longstanding calls for their wider implementation.

The general practitioner is often the only clinician who knows a person before he or she is diagnosed with cancer and may therefore be the clinician best placed to gauge the individual's likely reactions to the diagnosis. Furthermore, as depression and other mental health problems related to a cancer diagnosis frequently arise after the primary active cancer treatment phase, it is often the GP who will first identify a mental health issue and introduce and coordinate mental health care.

## Detecting psychosocial needs in cancer

Many people with cancer are distressed but will not meet *Diagnostic and statistical manual of mental disorders, 4th edition, text revision* (DSM-IV-TR)<sup>9</sup> criteria for a diagnosis of an anxiety disorder or major depression. This has led to recognition in the field of psycho-oncology of the broader concept of psychological distress, now considered the sixth vital sign in cancer (pain being the fifth).<sup>10</sup> Multiple factors will affect a person's capacity to manage the physical and psychological threat of a new cancer diagnosis, including past experiences of illness (including other cancers), stage of disease at diagnosis, the quality and accuracy of information received about current disease and treatments, and the communication skills and perceived availability of health care professionals.<sup>11,12</sup>

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MJA Open 2012; 1 Suppl 4: 13–17 doi: 10.5694/mjao12.10522

# Summary

- Depression in patients with cancer can present a challenging clinical problem for both general practitioners and the oncology team.
- Detecting depression in a patient with cancer, who may be debilitated and in pain, can be difficult.
- Cancer treatments can complicate antidepressant choices
- Community-based psychologists are an important resource for helping manage less complex and less severe psychological problems that can arise in the cancer setting.
- Specialist psycho-oncology services (where available)
  can help with more complex and severe presentations
  of depression by advising on the prescription of
  antidepressants and providing psychotherapy programs
  that address the patient's psychological orientation and
  needs and consider the patient's cancer type and stage.

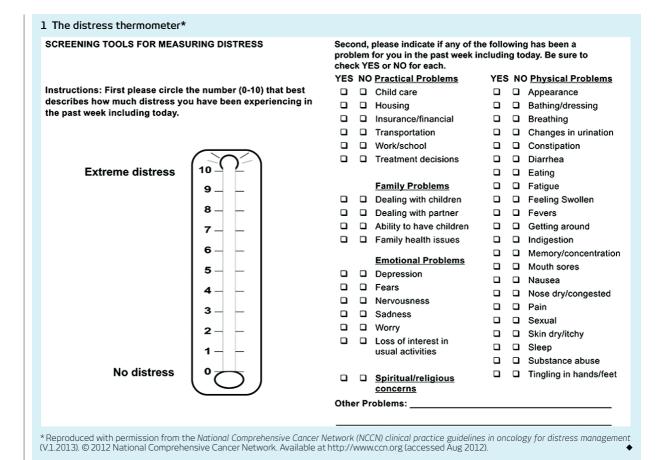
In the past decade, the trend towards use of screening tools to detect distress has grown. Problem checklists and the use of visual analogue scales, such as the "distress thermometer" (Box 1), <sup>10</sup> have shown the most promise. It is recommended that GPs routinely screen patients diagnosed with cancer for distress. In the process of this screening, GPs can normalise the experience of mild to moderate distress for the patient and reassure him or her that it is normal and appropriate to seek psychological support if distressing emotions persist or become intense and affect normal function (Box 2).

Although the prevalence depends on exact definitions, depressive disorders are said to occur in up to half of patients with cancer, <sup>2,13</sup> with a prevalence of more strictly defined major depression estimated to be 10%–25%. <sup>14</sup>

Existential distress is a particular form of distress that occurs in the context of a life-threatening illness such as cancer and may initially resemble a depressive state. It is characterised by loss of meaning and purpose, or the sense that one's fundamental frame of reference for life is being challenged. One characterisation of existential distress that appears to have clinical utility is "demoralisation syndrome", 15 a clinical state that encompasses helplessness, hopelessness, meaninglessness, subjective incompetence and loss of self-esteem. Modes of psychotherapy that directly address existential distress and demoralisation syndrome have been developed by psycho-oncology researchers.

#### Diagnosing depression in cancer

The DSM-IV-TR criteria for major depression<sup>9</sup> are predicated on the assumption that the patient is generally physically well, so that neurovegetative symptoms (weight loss, sleep disturbance, fatigue) can be used to establish the presence and severity of a depressive episode. Patients with



cancer receiving oncological treatment present a classification problem using this diagnostic system, because many of their symptoms may be due to the cancer or its treatment rather than to depression. In patients with cancer, the cognitive symptoms of depression (guilt, low selfesteem, hopelessness, helplessness, feeling useless or a burden, suicidal thoughts) are therefore especially important in diagnosis and in monitoring response to treatment. 16 It is important that doctors managing patients

#### 2 Good practice points for general practitioners

A preventive rehabilitation approach for managing psychological distress, anxiety and depression in people with cancer

Establish a regular review appointment with the patient throughout his or her cancer treatment, with the aims of:

- Maintaining a supportive therapeutic presence
- Screening for psychological distress at regular intervals, with particular emphasis on enquiring about distress at times of increased risk (eg, receiving bad news, ending treatment, a diagnosis of or transition to advanced or incurable disease, and transition to palliative care)
- Assessing family functioning, with referrals to family therapy (especially where there are dependent children under the age of 18 years)
- Making referrals for psychological support to a community psychologist under the Medicare Better Access initiative or to a specialist psycho-oncology service at a cancer centre, as needed
- Problem solving and education about ongoing health risks, including importance of lifestyle change and future cancer screening

with cancer are alert to these cognitive symptoms and seek expert psychiatric assessment of the patient's mood, rather than dismissing such symptoms as an expected or normal response to having cancer.

# Psychological management options

Through the Medicare-funded Better Access initiative, many GPs now have links to community-based psychologists. In some situations, a community-based psychologist who does not have specific training or expertise in the cancer setting may be able to offer the necessary support. However, in other circumstances, the patient may prefer to see or may require a more specialised clinician, and a referral to a specialist psycho-oncology service should be made (Box 3).

Australia's larger hospitals are moving to group their specialist cancer clinicians into "tumour streams", following the North American model of the comprehensive cancer centre. These tumour streams include breast, gastrointestinal, gynaecological, urological, head and neck, lung, melanoma and skin, neurological, sarcoma and haematological cancers. Each multidisciplinary tumourstream team may include surgeons, medical oncologists, haematologists and radiation oncologists, and their attendant specialised technical, nursing and allied health professionals. These teams can have complex lines of clinical responsibility as the patient transitions through diagnostic, staging, treatment and posttreatment surveillance phases, which can be difficult for GPs to navigate, as well as being bewildering and confusing for the

patient and family. Specialist psycho-oncology services are familiar with how these teams function and can often enable more effective and targeted mental health intervention than is possible for a GP or community psychologist outside the cancer centre.

### Referral to specialist psycho-oncology services

Sometimes patients or their families are reluctant to be referred to a psycho-oncology service even when a referral is appropriate. An approach to managing this situation can often be arrived at through collaboration between the psycho-oncology service and the GP. At better resourced cancer centres, mental health assessments can be arranged at a time when the patient is attending for oncological follow-up or during admissions, to minimise inconvenience, disruption to routine or any perception of being stigmatised by the referral. Tumour streams sometimes have dedicated sessions for psychologists and psychiatrists to streamline such referrals.

Where risk of self-harm or harm to others arises, it is vital that arrangements are made for an urgent assessment (usually psychiatric). Optimally, this would be arranged through the cancer centre already involved with the patient's care, but occasionally might need to involve crisis teams attached to area mental health services if there is acute risk or the patient is geographically remote from the cancer centre.

For other issues that may be managed by referral to a psycho-oncology service, see Box 3.

### Direct biological effects of cancer and cancer treatments on mood

It is thought that some types of cancer cause a depressed mood through humoral effects (cytokines)<sup>17</sup> and possibly through dysregulation of cell-mediated immune function. Direct mass effects in the brain or infiltration of the meninges can also potentially cause alterations in mood, as can any intracranial space-occupying lesion.

Corticosteroids (dexamethasone, prednisolone) are an integral part of many chemotherapy protocols and are also used for control of nausea and reduction of tumour swelling (especially in the brain). The high doses of corticosteroids used in many cancer treatment protocols often lead to mood disturbance, most often characterised by a mild hypomania as the dose is increased, and a depressed mood as the dose is reduced or ceased. 18

Chemotherapy drugs, including vinblastine, etoposide, cyclophosphamide and protein-bound paclitaxel, interleukin-β (used in the treatment of multiple myeloma) and interferon- $\alpha$  (used for some leukaemias and melanomas) have all been described as causing or contributing to depressed mood in some patients. 16 Some cancer treatments will affect hormone function, with potential adverse mood and cognitive side effects (eg, medically induced menopause after oophorectomy, or androgen ablation in prostate cancer treatment). 19,20 As many patients now receive chemotherapy and/or hormone therapy as day patients, the cancer centre team may not notice mood changes that may instead come to the attention of the patient's family or GP.

#### 3 When to refer to a community psychologist or a specialist psycho-oncology service

#### Refer to a community psychologist for:

- Mild-moderate psychological distress
- Pre-existing family relationship problems
- Worries about young or dependent children
- Family or caregiver conflicts
- Employment-related concerns
- Longstanding interpersonal difficulties
- Social isolation
- History of abuse (physical or sexual)
- Normal grief and bereavement

#### Refer to a psycho-oncology service for:

- Moderate-severe distress related to cancer diagnosis and treatment
- Longer-term adjustment difficulties and existential distress associated with cancer
- Past psychiatric history or alcohol and drug misuse
- Significant mood change
- Advanced disease at diagnosis
- Advice on choice of antidepressant and/or mood stabiliser
- Benefit from cancer-specific psychotherapy programs
- Competency issues, cognitive change, neuropsychiatric symptoms
- Refusal to comply with recommended treatment for unclear reasons
- Conflict with cancer-treating team
- Difficulty deciding between cancer treatment options
- Anxiety out of proportion to prognosis
- Phobic reactions to specific aspects of cancer treatment
- Familial cancer concerns
- Prophylactic cancer treatments to manage familial cancer risk (eg, mastectomy)
- Concerns about loss of fertility due to cancer treatment
- Treatments that will result in major loss of function or body part (eg, permanent stoma, amoutation)
- Major disfigurement or change in appearance
- Long-term debilitating cancer treatment
- Risk of self-harm or harm to others

#### Psychotropic use in cancer

The psychological stress and the direct biological effects of the cancer and its treatment all act to increase the incidence of depression and the likelihood of relapse of pre-existing depressive illness. Antidepressant therapy tailored to the symptom profile can treat major depression in the presence of cancer, and can also relieve some of the other common symptoms experienced with cancer (anxiety, insomnia, anorexia, nausea, agitation, fatigue, loss of motivation, pain, pruritus and hot flushes).<sup>21,22</sup> The evidence base for the use of particular antidepressants in cancer, particularly in the palliative care setting, is not strong, due to the paucity of research.<sup>23,24</sup> In choosing from a range of equally effective second-generation antidepressants, 25 psychiatrists in specialist psycho-oncology services take into consideration the patient's symptom profile, ambulatory versus palliative care status, comorbid illnesses, desired and undesired drug side effects, and potential drug interactions. Close liaison between the psychiatrist, the oncology team and the GP is necessary to ensure selection of the most appropriate antidepressant for the individual patient.

In some circumstances, a previously effective antidepressant will have to be discontinued because of interactions with chemotherapy or adjuvant treatments. As with the use of antidepressants during pregnancy, GPs are advised to seek an expert psychiatric opinion, as recommendations change and interactions between new antidepressants and new cancer treatments continue to be discovered.<sup>26,27</sup>

#### Psychotherapeutic support in cancer

Psychotherapeutic support can be of great benefit to many patients and their families facing life-threatening illness. In its simplest form, this may be through empathic, active listening at times of distress. All clinicians, including GPs, who are involved with cancer patients and their families are advised to develop essential communication skills through available programs. A suggested general approach for GPs is shown in Box 2. Psycho-oncology services can provide specialised psychotherapy services that may include individual, couple, family or group therapies.

A number of modes of psychotherapy have been developed and studied for different cancer populations. A comprehensive account of psychotherapies in cancer care can be found elsewhere;<sup>28</sup> we discuss some of these briefly here.

Supportive-expressive psychotherapy, which can be delivered to individuals or groups of patients with similar disease type and stage, aims to improve quality of life and alleviate depressive symptoms. Cognitive behaviour therapy and its cancer-focused derivative, adjuvant psychological therapy, can enhance coping skills, help manage anxiety and reduce moderately severe depression. Mindfulness techniques, which help ground the patient in the present lived experience and alleviate the apprehension of an uncertain future, have been included in recent approaches. Mindfulness-based therapies are now also being developed and tested in the cancer setting. Brief psychodynamic therapy may be appropriate where issues of attachment to caregivers, feelings of helplessness and powerlessness, dependency, loss of autonomy, or anticipatory grief are reactivating distress related to past losses and traumas in the individual's life. Existentially focused psychotherapy may be appropriate for some individuals in the early stages of cancer, but is particularly pertinent for those with advanced disease, when the search for meaning and purpose becomes paramount. Dignity-conserving therapy is a brief focused therapy designed for patients at the end of life. It involves the patient in creating a record of the things that have given most meaning to his or her life and the legacy he or she would like to pass on to others. Grief therapy involving the patient's partner or family, before or after bereavement, may help loved ones adjust to their loss and resolve issues that might otherwise lead to complicated grief. Survivors of cancer also have psychotherapeutic needs as they renegotiate their place in life, with changes in their bodies, relationships, developmental trajectories and altered view of

All encounters with patients and their families have the potential to be psychotherapeutic, but for more complex and ongoing issues, skilled therapists with special knowledge of cancer and the nature and impact of treatment are recommended. Flexibility with approach and model is often required at different stages of the patient's experience.

#### Conclusions

The GP can play a crucial role in detecting mental health problems in their patients with cancer, offering general support, initiating referrals to community psychologists or specialist psycho-oncology services, and reviewing the patient's progress. Knowing the person before he or she is

diagnosed with cancer and staying involved throughout the treatment process can make the GP a powerful preventive mental health agent, while also serving as an access point to more specialised care when it is needed.

Competing interests: No relevant disclosures

Provenance: Commissioned by supplement editors; externally peer

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