Journal of Radiotherapy in Practice

Journal of Radiotherapy in Practice (2012)
11, 33–43

doi:10.1017/S146039691100015X

Literature Review

The prevalence, detection and intervention for depression and anxiety in oncology

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Abstract

Clinical depression is the most prevalent psychiatric disorder amongst cancer patients and is associated with significant functional impairment, although often under-diagnosed and untreated. In one study, only 6% of patients with clinical depression were identified by their oncologists. The detection of and intervention for anxiety and depression in oncology is widely debated in the literature. Diagnosing clinically significant distress amongst cancer patients requires sensitivity as many symptoms of depression are very similar to those of some cancers themselves. The two detection methods discussed in the literature are either self report questionnaires (i.e., HADS) and diagnostic clinical interviews. There are several techniques described in the literature that have shown to be effective in reducing anxiety and depression in oncology. These can be broken down into four main categories, namely, cognitive behavioural therapy (CBT), counselling, drug therapy and complementary therapies, and it is acknowledged that patients receiving any type of intervention generally cope better than those who receive none at all. The effective management of anxiety and depression is dependent on the ability of health professionals to establish a rapport with patients and pick up on cues, regardless of whether intervention is necessary. However, an obvious lack of time and resources within the NHS can be a limiting factor, thus all health care professionals must take more responsibility for the detection of anxiety and depression, followed by the appropriate referral.

Keywords

cancer; depression; anxiety; distress; counselling; CBT; cognitive behavioural therapy; radiotherapy; therapy radiographer; complimentary; CAM

INTRODUCTION

This article reviews the literature available relating to the prevalence and detection of anxiety and depression in cancer patients, exploring methods of assessment and interventions appropriate in oncology. Furthermore, recommendations are made for developing practice, specifically in the radiotherapy setting and for future research.

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BACKGROUND

Defining anxiety, depression and distress

There are variable meanings in the literature for both anxiety and depression. *Anxiety* is 'a chronic state of tension, which affects both mind and body' (p. 28)[1] and *depression* is

explained as 'a mental state characterised by excessive sadness, activity can be agitated and restless or slow and retarded. Behaviour is governed by pessimistic or despairing beliefs, and sleep, appetite and concentration are disturbed' (p. 186)[2]. Frequently co-existing with each other, the U.S. National Co-Morbidity Survey suggests that 51% of patients with depression are diagnosed with an additional anxiety disorder within a 1-year period[3].

Studies should be reviewed with caution, as general terms such as *distress* and *worry* are commonly used, however, psychosocial distress is usually associated with depression and anxiety[4]. Generally, the literature describes distress as a multifactorial, unpleasant emotional experience[5] impacting on psychosocial and spiritual wellness affecting an individual's ability to cope with treatment[6], thus requiring some form of intervention. For the purpose of this article, distress will be defined as an emotional disturbance, significant enough to warrant professional, psychological or medical attention.

Prevalence of distress in oncology

Unsurprisingly, all cancer patients experience at least some level of distress[5,6], which is not just limited to the patient as the partner often suffers as well[7]. Following diagnosis, the typical sequence of emotions is initial shock/disbelief, anxiety, anger, guilt and depression[8]. The cancer trajectory can evoke constant, prolonged stress more apparent at the following significant times: awareness of symptoms, diagnosis, surgical intervention, treatment, follow-up and fear of recurrence[9].

Although researchers have measured anxiety and depression in oncology since the 1960s, the wide variation of reported prevalence is due to varying conceptualizations. Distress has been measured using a range of assessment methods, from brief self-report questionnaires to structured clinical interviews, with a range of classifications of distress used to assess different populations of patients[3]. Clinical depression is the most common psychiatric disorder in oncology[10], and clinical levels are estimated between 35 and 45%[10,11], although Sellick and Edwardson (2007)[4] state one third of all cancer patients experience prolonged increased distress levels. Progress in the treatment of cancer has led to reduced mortality, making the understanding of psychological morbidity essential, with more patients surviving the disease and living with the consequences[12].

Although a cancer diagnosis can generate an immense burden of fears, uncertainties, distress and psychological problems[4,11,13] some studies claim the prevalence in oncology to be equal to that of the general population[14]; however, according to a meta-analysis of 58 studies, cancer patients develop significantly higher anxiety and depression[3]. Another meta-analysis suggests that depression and anxiety in oncology has decreased over the past two decades. This, in part, may be due to earlier diagnosis, improved treatments such as lumpectomy versus mastectomy, better medical outcomes and enhanced social support[14].

There are some studies of the prevalence of psychological distress in paediatrics and adolescents with cancer, and it is widely accepted that they are no more depressed than that of the general population[3,15]. The results from this study demonstrate that this patient group are resilient in coping with their illness with positive emotional adjustment expected to facilitate in part the establishment of teenage cancer units; therefore, it will not be addressed within this article. However, as two thirds of children and adolescents now survive cancer, further research is indicated to establish how they can be best supported in the wider oncology setting[15]. The prevalence of distress in oncology patients will be discussed further.

Detection

The detection of anxiety and depression in oncology is a controversial subject, widely debated in the literature. Diagnosing clinically significant distress amongst cancer patients requires sensitivity as many symptoms of depression are very similar to those of some cancers themselves and may be treated differently[10,16]. For example, Cancer Research UK (2010)[17] report that tumours positioned in the

https://doi.org/10.1017/S146039691100015X Published online by Cambridge University Press

frontal lobe of the brain can cause personality changes including apathy, aggression and loss of inhibitions, whereas pituitary tumours are known to induce mood swings. Diagnostic assessment raises difficulties on both etiological and phenomenological grounds[18]. A subjective approach is vital when assessing both psychological and physical symptoms, for example, the level of pain or distress may only be measured based on what the patient says.

The two detection methods discussed in the literature are self-report questionnaires (i.e., HADS) and diagnostic clinical interviews. The Hospital Anxiety and Depression Scale (HADS) is the most widely accepted and commonly used instrument worldwide for screening clinically significant anxiety and depression[3,4,19]. HADS is a 4-point, 14-item self-report instrument, assessing depression (seven items) and anxiety (seven items)[13,19]. There are a number of other tools developed specifically for oncology, but this article will compare the two approaches, using HADS as an example of a commonly used assessment tool.

An easy-to-use, reliable and sensitive tool for assessing large numbers of cancer patients for psychological distress, HADS is described as an optimum balance between sensitivity and specificity. It appears to be patient friendly with one study of 3,548 patients reporting 97.7% returned and 85.5% completed.[4] HADS therefore has to be considered as a useful way of identifying distress. However, as with any screening tool, results may be influenced by reporting behaviour and may not always display an accurate reflection of actual suffering[4].

There are a number of screening tools used in oncology, that is, checklists that can highlight individuals' problems, and these are often developed locally to be administered in the clinic and may be more appropriate than HADS, which is normally used by specialists. The interview allows a more subjective and personal assessment of each individual and can be combined with a tool such as to provide a comprehensive and meaningful assessment by a specialist.

Interventions to reduce anxiety and depression

There are several intervention techniques described in the literature that have shown to be effective in reducing anxiety and depression in oncology[7,8,11,17,19], and patients who undergo any type of intervention generally cope better than those who receive none at all[14,21]. These can be broken down into four main categories: cognitive behavioural therapy (CBT), counselling, drug therapy and complementary therapies. Greer (2008)[5] emphasises the importance of establishing a rapport with patients, whichever intervention is used.

CBT is the dominant approach for treatment of a wide range of psychological disorders. Patients are taught to identify the negative automatic thoughts underlying their emotions[8,22], and therapy focuses on helping the patient reframe their thinking. In oncology, it is based on the premise that a patient's psychological response to cancer will be dependant upon how well the patient appraises their disease (i.e., personal meaning) as well as the consequential physical effects[5]. The connection between thinking, behaviour and experience can be explored to promote more positive outcomes. Although CBT has not been widely tested in oncology[8,22], it has already demonstrated significant benefits in reducing emotional distress in some patients[5].

Other methods of counselling can be employed, and through the skilled and principled use of relationships to facilitate self-knowledge, it can assist emotional acceptance, growth and the optimal development of personal resources[8]. The increase in demand for counselling has resulted in many studies evaluating its effectiveness, demonstrating evidence of positive benefits for clients, including reduction in pain, psychological morbidity, physical symptoms and maladaptive coping responses[8]. However, it should be stated that counselling is not a panacea for all patients showing signs of depression and anxiety and in fact may not be helpful for some.

Many cancer patients are increasingly exploring the use of complementary therapies to ease

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symptoms and reduce anxiety. The World Health Organization (WHO) defines *complementary and alternative medicine* (CAM) as a comprehensive term used to refer both to traditional medicine and to various forms of indigenous medicine[23]. CAM therapies include either medication therapies involving the use of herbs, animal parts or minerals, or non-medication therapies, for example, acupuncture or manual therapy. CAM is increasingly being used in parallel to orthodox medicine, for the treatment of chronic diseases. One recent U.S. study of 3,461 patients suggests that it is used by more than 50%, with 24.3% reporting positive results[23].

Drug therapy is used for the treatment of clinical depression in the general population, but its use is often viewed with caution in cancer patients. In fact, the National Institute for Health and Clinical Excellence (NICE, 2009) states that the use of drugs, that is, antidepressants should never be used routinely for the treatment of depressive symptoms or mild depression. Drugs should be considered as a last resort after psychosocial interventions, unless there is a previous history of moderate/severe depression, depression that complicates the care of a physical health problem or when depressive symptoms are present for at least 2 years. It is advised that only the newer antidepressants should be administered due to favourable side-effects[18]. This is a conservative stance when one considers that the prognosis for many patients is less than 2 years.

We know that clinical depression is the most prevalent psychiatric disorder amongst cancer patients and is associated with significant functional impairment. Therefore, it is surprising that it remains an often under-diagnosed and untreated 'side-effect'. In one small study consisting of 33 patients, only 6% of patients with clinical depression were identified by their oncologists[10].

DISCUSSION

The following discussion attempts to critically analyse current methods for psychological detection and intervention in the United Kingdom, comparing current practice with clinical guidelines and recommendations as well as practice in other countries. Improvements will be suggested for both clinical practice and future research.

Predicting psychological distress

The diagnosis of cancer is distressing for most patients, although after the initial shock some adjust surprisingly well. It would be useful to be able to predict which patients were most likely to worry, so scarce psychological intervention resources could be best utilized[20]. There is a notion that some level of psychiatric distress is normal for patients with a serious illness[3,4,10,11,14,24]. Although many clinicians working in palliative care have speculated that the chance of a mental disorder increases as death approaches, this was not found to be the case[24]. In one study; 43 out of 100 clinicians (43%) admitted they often use disease severity to anticipate any likely distress; however, the prognostic category of cancer was not found to be significantly related[20]. These findings begin to address outstanding questions regarding the course of depression and anxiety disorders near the end of life, which challenge the assumption that mental health problems are exacerbated[24].

Alternatively, as distress at the end of life is so often considered normal, it may result in health workers overlooking or under-treating symptoms. Some studies suggest clinicians underestimate the level of psychological morbidity amongst more severely depressed terminally ill cancer patients[3,4,10,13,20,24]. In one study consisting of 585, depression was found to be a predictor of disease progression and mortality, with 58.5% of terminally ill patients openly discussing assisted suicide[14]. However, the reliability of this statement is questionable, with the study failing to use a validated measure of depression.

Psychological distress may be a reaction to the unique challenges of cancer or may be instigated by underlying vulnerability to anxiety and depression disorders[11,14,16,20] with previous psychiatric diagnosis associated with poor emotional

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outcome[14,16,18,20]. Unsurprisingly, patients with a history of anxiety and depression at the time of admission were found to hold more psychological distress during the course of their treatment. Tumour stage, sex, depressive symptoms, openness to discussion, available support, disease symptoms and size of social network could be used to accurately predict the likeliness of depression 3 years after treatment[3].

Social isolation, personal/family history of depression, drug abuse, socio-economic pressures, conforming personality style, pain and pre-morbid coping skills are all psychiatric risk factors[18]. The presence of pain also increases the chance of depression[14,16,20,25] although it could be argued that the depression itself enhances the intensity of the pain. Cancer treatment–related factors may also be a significant predictor with several chemotherapy agents, steroids and analgesics linked with increased psychological morbidity[16]. Invasive surgery and radiotherapy regimes also increase the likelihood of psychological distress[16,25], and clinical depression is particularly associated with oropharyngeal, pancreatic, breast and lung cancers[3,16]. Although these predictors may be useful, the factors affecting the individual's ability to cope should be considered rather than disease site.

Individual patient coping mechanisms

A person's ability to cope with cancer can have a direct impact on levels of distress. In one study, the factor most associated with distress was found to be dwelling on the initial clinic visit, as attending the clinic reminded patients of having cancer[9]. At this point, more attention should be paid to the patient's individual thoughts, and routine questioning could be used to alert staff when more formal psychosocial support is required[6,20]. The practise of routine psychological assessment could be introduced in all hospitals involved in the care of cancer patients, and general predictive categories such as cancer site or treatment should not be solely relied upon as indicator as all patients are individuals.

Patients are not always aware of the potential benefits of psychological interventions, and it is important to identify patients who may not desire psychological support as their reluctance may be explored. Regular screening for distress and desire for support would allow implementation of interventions tailored to both the patient's needs and desires[13]. Furthermore, the patient's reluctance to disclose their current mood is often a result of fear of being labelled as a burden[4], whereas the stigma of being associated with anything "mental" can be unappealing[9]. These findings highlight the need to inform patients about the psychological consequences of cancer, the available support and the potential benefits of such support[13].

The way patients adjust along their cancer journey depends on their individual innate coping strategies/responses. A recent meta-analysis suggests that emotional repressiveness is a predictor of cancer incidence, and this repressive emotional trait has been termed the *cancer personality*[14]. They postulate that a tendency to over control has been associated with an elevated risk of cancer incidence and disease progression, and those patients who reported extreme suppression were at higher risk of cancer. These people had never or no more than twice, during their adult lives, openly shown anger, almost always concealing their feelings. Although the reliability of this statement is both questionable and unproven, the study shows that those who tend to consciously suppress such emotions are more likely to experience anxiety and depression. It could therefore be suggested that a patient's handling and reporting of emotional distress may contribute to both depression and possibly disease progression[14].

Based on the theory of cognitive adaptation; positive personality factors help people to cope with critical life events.[19] Optimism was found to co-occur with helpful coping strategies, like seeking out support[5,19,26], and depression is three times more likely in terminally ill patients, who failed to acknowledge their prognosis[3]. Over the last few decades, the influence of personality factors such as optimism has attracted growing interest. Pessimistic patients with low levels of optimism were at higher risk of

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developing anxiety and depression disorders, resulting in poorer quality of life[3,11,19].

Helplessness is a negative coping response associated with increased emotional distress, whereas positive psychological attributes such as fighting spirit and resilience are undervalued in the literature[5]. The definition, aetiology and measurement of personal attributes, variously referred to as resilience, hardness and fighting spirit, provide a more holistic consideration for the patient[4] and therefore warrant further investigation[5]. Indeed, patients are bound to have different traits in their personality, which contribute to their ability (or inability) to cope. Becoming familiar with a patient and taking certain aspects of their personality into consideration should give rise to more appropriate personalized management.

The benefits of psychological interventions

Oncology has traditionally focused on pathological outcomes, but the need for psychosocial support has become obvious, and it is important that health care professionals become informed about the psychological strategies available. Clinicians should, however, consider pharmaceutical therapy in addition to psychiatric interventions in more severe cases[9,18].

One study that employed 'humanistic counselling' focused on the experiences of the individual or their own perceptions. Very positive attitudes were expressed; almost all patients believed they had benefited from the support whilst they confronted fears of death[8]. Counselling helped patients work through powerful thoughts and emotions, coming to terms with their disease and regaining a sense of control. Peer-group counselling has been successfully implemented in many areas and could potentially out-perform individual counselling, lending patients a sense of parity, equivalence and shared destiny, as well as helping and advising fellow sufferers[21].

The high level of perceived benefits counselling offers could possibly be due to methodological issues, such as selection bias and social desirability, or even the characteristics of patients that seek out counselling. Patients are self-referred and perceived themselves to have a problem that could be helped by counselling, at a time during their journey when they were ready. However, one could argue counselling provides a wide range of benefits to patients who view their problems as amenable to this form of intervention and therefore is highly valuable in a self-selected patient population. However, for some patients, attending what they thought of as specialist cancer counselling created an expectation for medical advice. They described their experience as frustratingly Abstract and reflective; as one patient put it, 'I felt like a parrot repeating things' (p. 132).[8] Nevertheless, although they themselves gained little benefit, these patients generally seemed to maintain confidence in counselling itself[8].

Interventions focusing on mental awareness and frequency of positive thoughts could have a better impact than interventions specifically targeting relief of symptoms, reducing psychiatric morbidity and improving quality of life[26]. Meditative practices, with the use of mindfulness techniques, to reduce anxiety and depression have been suggested[11]. Clinical trials have supported the use of mindfulness based stress reduction (MBSR), where patients are taught to pay more attention to their own thoughts, to become more aligned in their psychological adjustment during their cancer journey. MBSR is beneficial for both cancer patients and their partners for reducing mood disturbance as well as symptoms of distress[7].

Mindfulness-based cognitive therapy (MBCT) is a recent refinement of MBSR for depression, focusing more specifically on the rumination that frequently maintains recurrent depressive episodes. Ruminative processes have been identified as significant etiological factors for anxiety and depression; therefore, the effectiveness of MBCT for cancer patients needs to be established. From the first randomized controlled trial of MBCT in oncology, 3-month post-intervention feedback indicated that treatment gains were consistently positive and maintained. These results should be reviewed with caution, however, as the self-selecting patients

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could have been particularly motivated to engage in the programme and more extensive research is required[11].

Responsibilities of health professionals for detection and screening

There is a limited role played by general practitioners in primary care, with recognition of symptoms, investigation and referral. Identification and treatment of psychological problems are not formally recognized or integrated into existing primary care structures. This may be partially due to lack of communication between primary and secondary care, 'only one in five general practitioners had received a report from their corresponding oncologist after initial consultation'[6]. It is suggested that primary care resources are scarce, and with general practitioner's limited knowledge of psychiatric symptoms and diagnosis inadequate to effectively assess mood disorders, this perhaps has lead to a less-than-optimum service[10].

The detection and intervention of anxiety and depression in oncology is almost exclusively undertaken in secondary care and will remain this way until the role of primary care is more firmly established[6]. An overall management system for the detection and intervention for psychosocial problems, using community and primary care, may improve service to patients. If we consider the management of diabetes, for example, the role of primary care is well understood with general practitioners and nurses being able to provide emotional support and reassurance, tailored to the specific needs of the patient. Therefore, a range of interventions for psychological problems could be offered by primary care health professionals, and work is required to implement this[6,21].

All members of the multi-disciplinary team should take more responsibility not only for routine screening but also for placing a greater emphasis on their own duty to communicate the needs of patients directly with each other. Liaising with other allied health professionals about the care of individual patients provides opportunities for constructive advice, professional development and increased job satisfaction whilst contributing towards a forward thinking, patient-centred culture in our service.

Some clinicians consider psychological therapy for the cancer patient as a futile exercise, as emotional distress is simply a normal, appropriate response. This attitude needs eliminating from our service, as the benefits of therapy in reducing anxiety and depression are evident[5,14,21]. It is imperative to differentiate anxiety and depression from the expected physical symptoms of the disease, and health care professionals need to be alert to suspected psychological morbidity[4,6,22,24]. An increased awareness and training amongst all health professionals in oncology is needed, as too often they fail to recognise distress, with their lack of knowledge, forcing them to rely on superficial signs.[27]

Recommendations for clinical radiotherapy practice

Studies suggest only a small percentage of patients are diagnosed with psychological problems in radiotherapy, due to under-reporting of symptoms, lack of awareness or understanding of available services and under-recognition of symptoms by some health care professionals[6]. There is a need for a multi-disciplinary screening approach and routine questioning by health care professionals; in particular, therapy radiographers could contribute to the holistic assessment of patients and refer appropriately when formal psychosocial support is required[20]. Problems usually remain undetected until their adverse impact on quality of life is severe; therefore, the service could undertake a more proactive approach, meeting the needs of patients and families rather than waiting for a crisis[4].

The time constraints placed on therapy radiographers (roughly 12 min per patient contact) mean additional duties such as referral could be difficult to implement. However, one of the primary roles of the therapy radiographer should be to provide the patient with the opportunity to disclose any psychological concerns. This could be facilitated via a simple questionnaire, that is, concerns checklist to identify those that require full psychological assessment. It is important to consider that

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whilst this may be deemed time-consuming for every patient, only a proportion of patients would need such a specialist referral thus enabling the prioritization of patients relative to the resources of the service.

Some therapy radiographers, although very competent, lack the ability and/or desire to empathise and emotionally reach out to patients. They are in a unique situation to be able to assess the patient's emotional needs as a consequence of the familiarity and trust established during daily treatment sessions. This prime position should enable contribution towards timely referral to the appropriate specialist. In addition, more deliberate and routine communication across the radiotherapy multidisciplinary team, including counsellors and psychologists, is paramount to a more effective service.

Radiotherapy should not be a profession whereby success is judged solely on 5-year survival rates. The detection and intervention of psychological problems should be well integrated into the overall management of patients, and thus success is directly related to patient outcomes, including psychological adjustment. Where currently successful referral of a patient to psychological care by therapy radiographers is perceived as an 'add-on', there should be an expectation that all patients are competently assessed by this professional group, which arguably has more contact with the cancer patient than any other.

Areas for future research

Generally, the more narrowly depression and anxiety are defined, the lower the prevalence is reported. Symptoms occur on a broad spectrum, ranging between sadness and major affective disorder, making the study of anxiety and depression challenging[3]. The methodology deployed is a significant variable responsible for the wide range of prevalence[3,10,13,16,18,24], and rates can be measured between 3.7% and 58%[4,10,13,16,26]. The main variations amongst studies are diagnostic tool (interview vs. scale), definition of depression, clinical staging, time since diagnosis, previous cancer treatment, previous treatment for depression and hospitalization status[18]. The lack of standardization, in terms of populations studied, assessment instruments, cut-off scores, type of interview/diagnostic criteria employed and disease site/stage also contribute to the wide variation in prevalence of psychological distress[3].

The effects of cancer treatment as well as non-cancer-related variables that affect mood are often not considered amongst the literature; for example, cytotoxic drug and hormone use are seldom presented in study data. Few studies note the time of onset of depression or correlated patient's history of depression with current distress or functioning. Furthermore, a significant proportion of patients with a good psychiatric and emotional response to cancer may not be accounted for, as these patients could also be recruited into intervention studies[3]. Alternatively, many studies are orientated towards the patients who are fit enough to take part, with some clinicians omitting severely ill patients[13]. Thus, a clear picture of the prevalence of anxiety and depression in oncology patients has yet to be established.

Few studies have examined the predictive utility of psychological assessment tools for detecting distress in oncology, whereas the sparse studies that do exist have generally focused on cancer-specific sites (e.g., breast or head and neck). This may not have the same predictive value amongst a broader range of cancer types, limiting understanding of the phenomenology of depression experienced by the cancer patient[10]. Patients are often grouped into broad categories (i.e., palliative care/terminally ill), which do not capture the diversity of such samples, whereas comparing patients at various times in their own 'cancer journey' could enhance our understanding of the transition of psychiatric conditions over time[24]. However, the aim of capturing a more holistic view is complex as patients cannot be categorized like stamps in a collection; they should be acknowledged as individual people with a wide range of different psychosocial factors impacting their well-being, and this makes research problematical and ultimately contestable.

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Longitudinal detection of psychological distress is rare, with the majority of studies assessing anxiety and depression with self-report questionnaires varying in quality, rather than using diagnostic interviews[14,20]. Regardless of which screening tool is used, they must be deemed valid and reliable, easily understood and completed and easily scored and interpreted[4]. A 'biosocial model' combining biological/clinical, psychological and social variables would more accurately describe depressive symptoms[25]. A prospective, longitudinal investigation of an ethnically and geographically diverse sample of patients, at various points in time, would provide the best available data for baseline assessment[24].

It is useless to employ more than one or two tools as many patients are not interested in completing long questionnaires. Self-assessment questionnaires are often compiled on a few items, are economical and easy to fill in[28], whereas structured clinical interviews can be advantageous for the detection of anxiety and depression, allowing for adaptations to be made by the evaluating health professional[24]. From a clinical perspective, interviews have a pivotal role in the evaluation of practice and the ability to access psychological support, providing an opportunity for patients to ask for support. They are arguably the best method of screening clinical depression in cancer patients[10,18,26], A study of 285 patients demonstrated that 44.1% requested support during their interview yet failed to do so in their initial questionnaires[28]. It is, however, important to recognise that screening tools are not diagnostic tools and only with the help of specific instruments following referral to mental health services can a psychiatric diagnosis be confirmed[4].

Outcomes of psychological interventions should be measured in a way which allows clinical effectiveness to be assessed. Within the literature, there is a preference for randomised controlled trials and most studies use standardized quantative instruments for measurement. However, these measures overlook an important dimension; the patient's own perception of the benefits which they derive. For example, the benefits of counselling are not well captured by standard research instruments, but using client-defined outcomes may provide a sensitive way of gauging the true value of counselling in cancer patients[8].

CONCLUSION

This review has to some extent reported on the current evidence of psychological assessment in oncology and the key interventions commonly utilised. Furthermore, recommendations are made for improving practice in the radiotherapy setting and lessons for future research.

Cancer patients suffering from anxiety and depression experience significant reduction in quality of life, and they have longer recovery times requiring more health care resources. The development of detection and intervention methods for psychological distress in oncology is therefore essential[3,10,18,26].

Anxiety and depression often remain undetected until the adverse impact on quality of life is severe; thus, services should undertake a more pro-active approach to assessment rather than waiting for a crisis. Psychological distress can be measured and responded to[4,26], and timely, accurate screening of psychological distress is essential. Many studies outline the need for routine screening and the implementation of cost-effective treatment. This can only occur if professionals are trained and services resourced[3].

Future research must focus on establishing diagnostically reliable criteria, with the development of standard instruments for measuring distress which could correlate the individual patient's past psychiatric history with current episodes. Variability in symptom presentation associated with the trauma of a cancer diagnosis would suggest that screening should be undertaken at various points throughout the cancer illness trajectory[4].

Psychological interventions that enable patients to live as positively as they can should be used; however, the established techniques proven to be effective such as CBT require

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extensive input from specialist staff with demand largely outnumbering availability[26]. There is wide debate as to whether all patients should receive psychological support or only those who are at higher risk of developing more severe anxiety and depression[9]. Moreover, timing of therapy is crucial; at diagnosis, patients may be in shock and far too mentally occupied to discuss painful emotions and feelings with therapists. Future research should focus on the systematic and controlled evaluation of such interventions.

Oncology services should be addressing the psychological needs of individuals; it is evident that many patients go undetected and do not receive specialist intervention. One could argue that the current level of service is inadequate, the result of an obvious lack of time and resources within the NHS. However, all health care professionals must take more responsibility for the detection of anxiety and depression and work more effectively as a multi-disciplinary team to address patients' needs.

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