Many patients with cancer lose weight, but their thoughts on it are often overlooked. By acknowledging their feelings, nurses can help improve these patients’ quality of life.

The impact of weight loss on patients with cancer

**In this article...**
- Why people with cancer are susceptible to weight loss
- How cancer-related weight loss can affect wellbeing
- Strategies to address patients’ feelings and needs

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Weight loss due to cachexia is a common symptom in patients with advanced cancer and often affects their quality of life. This article outlines a literature review conducted to better understand the effects of weight loss on patients with cancer. Five themes were identified that encompassed patients’ experiences, including personal response, physical effects, emotions and moods, changes in eating habits and effects on social life. The review suggests strategies that health professionals can implement to ensure patients’ and their families’ feelings about weight loss are taken into consideration.

Weight loss is one of the most common symptoms experienced by patients with cancer (Potter et al, 2003). Malnutrition and weight loss in these patients result from:
- Reduced dietary intake;
- Impaired ability to use or absorb nutrients;
- An increase in nutritional requirements as a result of the disease (Holder, 2003).

Weight loss is classified as a reduction of at least 10% of pre-illness body weight (Donnelly et al, 1995), with between 31% and 87% of patients experiencing weight loss and malnutrition as a result of cancer (Dowcs et al, 1980).

Cancer-related weight loss is more prevalent in some cancers than others; for example, patients with gastric, pancreatic and lung cancers report more cancer-related weight loss than those patients with prostate cancer or cancer of the colon (Del Ferraro et al, 2012).

Weight loss due to cancer is commonly referred to as cancer cachexia and is a wasting syndrome caused by changes in metabolism. Cancer anorexia or loss of appetite is a common symptom of cachexia (Porter et al, 2012), and can have a devastating effect on patients and their families. For example, eating is a social activity with emotional connotations, and many social and religious functions revolve around providing and receiving food (Holder, 2003). Weight loss and anorexia can be a constant reminder to patients of their illness and often have negative associations (Van Cutsem and Arends, 2005).

Families can also be affected as they might worry about their relative’s loss of appetite, change in appearance and the implications of weight loss on their prognosis; they may become distressed and frustrated at health professionals’ often inadequate and inappropriate responses to cachexia (Porter et al, 2012).

Despite considerable research in this area of care, and guidelines on its management, cachexia often appears to be overlooked by health professionals. It represents a significant unmet need in the care of patients with cancer (Radbruch et al, 2010). The impact of cachexia on quality of life means weight loss needs careful consideration when care is being planned (Poole and Froggatt, 2002). With advanced

**5 key points**

1. Many people with cancer will experience weight loss and malnutrition
2. Cancer-related cachexia can be distressing for patients and their families
3. Weight loss can affect patients’ ability to carry out day-to-day activities
4. Patients may experience altered body image, which can result in them isolating themselves
5. Obese or overweight patients who experience cancer-related weight loss might not consider the change to be negative

One study noted cancer patients’ attitudes to food became routine and functional.
treatment and extended survival, it is probable that patients will experience weight loss for longer periods; it is vital to understand the patient experience, so that care may be improved.

**Undertaking the literature review**

The aim of this literature review was to better understand patients’ experience of cancer-related weight loss and its impact on quality of life.

A systematic search of the Cumulative Index to Nursing and Allied Health Literature, Medline and British Nursing Index databases was conducted using the following keywords and phrases: cancer, carcinoma, cachexia, weight loss, quality of life, patient experience, patient attitude and patient perceptions. Thirty-seven research articles, relevant to the topic under investigation, were identified. Abstracts were read to identify those articles most relevant to the topic area.

Articles were included if they were:
- Written in English;
- Reporting on primary data;
- Published between 2003 and 2013;
- Did not also focus on other symptoms or causes of weight loss.

Eight articles were critically appraised using a validated critical appraisal framework (Caldwell et al, 2009). Of these, three used qualitative research methods (Stamatataki et al, 2011; McClement and Harlos, 2008; Reid et al, 2009); three used a mixed-method approach (Hopkinson, 2007; Strasser et al, 2007; Hopkinson et al, 2006a); and two used quantitative methods (Rhondali et al, 2013; Hopkinson et al, 2006b). Findings were analysed using a thematic-analysis approach (Braun and Clarke, 2006), with themes grouped into five categories:
- Personal response;
- Physical effects;
- Changes in eating habits;
- Effects on emotions and mood;
- Effects on social life.

**Personal response**

Personal response to weight loss is generically referred to as body image, which is a psychological construct that defines how individuals see their body (McClement and Harlos, 2008). Body image is inextricably linked to feelings about the self.

The self is conceptualised as the relationship between two states: the actual self-state and the ideal self-state. Individuals are motivated to match these two self-states. When a discrepancy occurs, such as in cancer cachexia, this results in negative emotional and behavioural consequences; for example, it can affect relationships, social functioning and routines (White, 2000). Five articles explored body image (Rhondali et al, 2013; Stamatataki et al, 2011; Reid et al, 2009; McClement and Harlos, 2008; Hopkinson et al, 2006a), with findings including both negative and positive responses.

Rhondali et al (2013) used various measures to assess body-image dissatisfaction, including the Body Image Scale (Hopwood et al, 2001), the Edmonton Symptom Assessment System (Moro et al, 2006) and the Hospital Anxiety and Depression Scale (Bjelland, 2002). They found that patients with advanced cancer, who experienced weight loss of at least 10% of their usual weight, had poorer body image and higher deterioration of body image than other patients (Rhondali et al, 2013).

Two qualitative studies (Reid et al, 2009; Hopkinson et al, 2006a) showed that some patients were shocked by rapid changes in their appearance and this could result in loss of identity.

This loss of identity of their “usual” self resulted in a separation from their “new” self, so their body image was no longer familiar to them (Reid et al, 2009).

However, some patients were less concerned about changes in their appearance, as they had expected to lose weight as a result of their cancer diagnosis (Stamatataki et al, 2011; Hopkinson et al, 2006a).

In addition, Rhondali et al (2013) found that 23% of patients who had lost at least 10% of their body weight reported having an improved or much improved body image as a result. However, these findings need further exploration, as 63% of these patients were overweight or obese before their illness.

**Physical effects**

As the illness progressed, patients became more tired as a result of weight loss (Stamatataki et al, 2011), which often restricted their activity (Stamatataki et al, 2011; Strasser et al, 2007; Hopkinson et al, 2006a). They complained that weight loss led to reduced mobility and increased dependency on others when performing day-to-day activities (Strasser et al, 2007; Hopkinson et al, 2006a), and was troubling because it was accompanied by weakness, leading to loss of independence (Hopkinson et al, 2006a). Some patients noted that they needed help to be able to go out and had no strength at all (Hopkinson et al, 2006a). Strasser et al (2007) also reported that patients experienced progressive physical weakness when they experienced weight loss.

**Changes in eating habits**

In a survey of patients with advanced cancer, 76% of respondents raised concerns about their declining food intake as a result of weight loss (Hopkinson et al, 2006b). However, McClement and Harlos (2008) found that a number of patients and their families expected a reduction in food and oral intake as a normal symptom of advanced cancer.

In Stamatataki et al’s (2011) study, patients reported that their appetite was, in some cases, completely diminished; this was attributed to the side-effects of chemotherapy and radiotherapy, which affected their appetite. Reid et al (2009), however, found that patients’ changes in appetite were either tumour-induced or caused by early satiety.

Eighteen couples took part in Strasser et al’s (2007) mixed-methods study, which revealed that patients often had some appetite but it disappeared when food was served, especially when portions were large; patients also reported feeling full after eating only small amounts. The study indicated that patients’ attitudes towards food changed, and that eating had taken on a routine function, which was primarily done to prevent further weight loss and death (Strasser et al, 2007).

Other studies, such as those by Reid et al (2009) and Hopkinson (2007), found that patients tended to modify their intake of food to include only enough calories to maintain their weight.

**Effect on emotions and mood**

Weight loss among patients with cancer often resulted in anxiety, depression, distress, worry, frustration and guilt (Rhondali et al, 2013; Stamatataki et al, 2011; Reid et al, 2009). Five articles explored anxiety and depression (Hopkinson et al, 2006a; Reid et al, 2009; McClement and Harlos, 2008; Rhondali et al, 2013), which often resulted in feelings of sadness, anger and guilt.

**On a practical level this should include:**

- Assessment of weight loss
- Treatment of reversible causes of anorexia
- Stimulation of the patient’s appetite
- Ongoing assessment to establish what is working

*Source: Del Ferraro et al, 2012*
Nursing Practice
Review


Using the Edmonton Symptom Assessment System and the Hospital Anxiety and Depression Scale, Rhondali et al (2013) found that weight loss was often associated with negative psychosocial outcomes; 48% of those cancer participants surveyed experienced anxiety and depression.

Hopkinson et al (2006b) also found that in a survey of advanced cancer patients, concerns about weight loss and loss of appetite were common. Patients found these cancer-related symptoms to be both troublesome and distressing (Hopkinson et al, 2006b).

When weight loss became visible to patients, the outcomes often included increased anxiety, distress and uncertainty (Stamatakis et al, 2011; Reid et al, 2009; Hopkinson et al, 2006a). Weight loss was interpreted as a "bad sign" or viewed negatively by many patients (Reid et al, 2009) and indicated that their illness was in an advanced stage. Participants in two studies believed weight loss signified that the disease had taken control of their bodies, as well as the limitations of their ability to control the illness (Reid et al, 2009; Hopkinson et al, 2006a); it increased their awareness that death was imminent (Hopkinson et al, 2006a).

Effects on social life
Patients’ body image, change in appearance and resultant physical weakness often left them feeling embarrassed, which reduced their ability and desire to socialise. Stamatakis et al (2011), Reid et al (2009), McClement and Harlos (2008) and Hopkinson et al (2006a) all identified that patients tended to avoid social situations when they experienced weight loss. Patients perceived there to be a stigma around weight loss, which reduced their desire to socialise with others (Stamatakis et al, 2011). They reported being unsure of the response they might receive from others about their weight loss (Reid et al, 2009). Patients often became reclusive, reluctant to socialise outside of their immediate family, and even requested that relatives prevent others from visiting them (McClement and Harlos, 2008).

Patient concerns about weight loss were also due to the embarrassment they felt because their clothes no longer fitted them; they were self-conscious (Stamatakis et al, 2011).

However, not all patients intentionally avoided friends due to weight loss. As previously mentioned, the physical effects of weight loss often restricted their social activities. Some patients found it impossible to leave their house unaccompanied, without compromising their safety, which resulted in loss of independence and progressive isolation (Hopkinson et al, 2006a).

Addressing the issues
The literature review highlighted issues associated with cancer-related weight loss that are often encountered by patients. The findings were supported by others suggesting that those with advance terminal illness often experience loss of hope and meaning in their lives (Lloyd-Williams et al, 2008).

Both patients and their families often report frustration with the inadequate and inappropriate response that they receive from health professionals to this distressing condition (Porter et al, 2012). There is sometimes an attitude of inevitability among nurses concerning this side-effect of cancer, and a belief little can be done (Hopkinson et al, 2006a). However, several management strategies can be implemented to improve the patient’s quality of life (Box 1).

Conclusion
Cancer-associated weight loss has a considerable social, psychological and physical impact on patient experience, and affects quality of life. However, strategies can be put in place by health professionals to mitigate the distressing effects.

Those caring for patients with cancer should explore more carefully patients’ perceptions and experiences of weight loss; they should take note of the fact that implementing appropriate healthcare interventions could improve these patients’ quality of life. This is particularly pertinent given that many patients with cancer are surviving for longer.

References

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Carers’ influence on diets of people with advanced cancer
Bit.ly/NTCancerDiet