

# Components That Influence Assessment and Management of Cancer-Related Symptoms: An Interdisciplinary Perspective

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**Purpose/Objectives:** To describe, from an interdisciplinary perspective, how cancer-related symptoms are assessed and managed in a cancer care setting and to describe the components that influence symptom management.

**Design:** Descriptive, qualitative, and cross-sectional.

**Setting:** An oncology and hematology department in a university hospital in western Sweden.

**Sample:** 31 nurses, physicians, physical therapists, dietitians, occupational therapists, and a medical social worker who all cared for patients with cancer-related symptoms.

**Methods:** Data were collected in focus groups and analyzed using content analysis.

**Main Research Variables:** Cancer-related symptoms and symptom management.

**Findings:** Symptom management, from a clinician's perspective, is a process involving different components. Four themes emerged from the data analysis: creating a relationship with the patient, understanding the patient, assessing the symptoms, and cooperating as a team.

**Conclusions:** This study highlights several components that should be discussed in an effort to enhance symptom management. Discussion will help ensure that barriers to effective symptom management are acknowledged and addressed when implementing clinical routines designed to enhance management of different symptoms. In addition, these components should be acknowledged in the interest of facilitating adherence to symptom management strategies. Whether these components are important factors from patients' perspectives remains unknown.

**Implications for Nursing:** Enhancing symptom management is not only a matter of implementing clinical guidelines; it must be preceded by teamwork, assessment, and evaluation method discussions and the ability to create a relationship with the patient. Nurses should be aware that their understanding of a patient affects their assessment of that patient's symptom experience.

meanings they attach to symptoms (Armstrong, 2003; Dodd, Janson, et al., 2001; Haworth & Dluhy, 2001). Fleishman (2004) stated that symptom management plays a role in every stage of cancer treatment, beginning on the day of diagnosis and continuing throughout the oncology continuum. Dodd, Janson, et al. regard symptom management as a dynamic process that is modified by individual outcomes and the influences of personal factors, environment, and health or illness. The goal of symptom management is to avert or delay a negative outcome using different strategies (Dodd, Janson, et al.). Symptom management is an intentional activity that depends on patients' subjective responses to experienced symptoms; it can be initiated or performed by patients or healthcare professionals (Fu, LeMone, & McDaniel, 2004). Despite the increasing knowledge concerning cancer-related symptoms and the availability of evidence-based interventions, patients continuously experience untreated symptoms (Di Maio et al.) and do not receive adequate help to alleviate them.

Barriers to good symptom management have been investigated and reported, mostly in cancer-related pain and from patients' perspectives (Anderson et al., 2002; Cleeland, 1987; Dawson et al., 2005; Johnson, Kassner, Houser, & Kutner, 2005; Passik et al., 2002; Schumacher et al., 2002; Stone et al., 2000; Ward et al., 1993). Other barriers include interventions that are not adequately discussed (Passik et al.), no structured assessments are available (Anderson et al.; Farrell, Heaven, Beaver, & Maguire, 2005; Stromgren, Groenvold, Sorensen, & Andersen, 2001), a lack of follow-up, and interventions

Patients with advanced cancer and patients undergoing cancer treatment have a high incidence of cancer-related symptoms (Miaskowski et al., 2006; Walsh, Donnelly, & Rybicki, 2000) that sometimes are not detected or alleviated. Untreated cancer-related symptoms can greatly affect patients' functional status and quality of life (Ahlberg, 2004; Ahlberg, Ekman, Gaston-Johansson, & Mock, 2003; Anderson et al., 2002; Burrows, Dibble, & Miaskowski, 1998; Di Maio et al., 2004; Glover, Dibble, Dodd, & Miaskowski, 1995; Miaskowski & Lee, 1999). Assessing and managing symptoms is a major task for clinicians when it comes to improving the overall situation for patients with cancer and often requires understanding patients' experiences and the

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### Quick Facts: Sweden

**Geography:** Sweden is situated in northern Europe with Denmark, Norway, and Finland as neighboring countries. The capital is Stockholm.

**Population:** The total population is approximately 9 million as of 2007. Similar to other Western countries, the population in Sweden is becoming increasingly older. About 18% of the population is aged 65 years or older. Advancements in medical treatments and expansion of treatment options have increased the demand for care.

**Healthcare system and programs:** Health policy is a national-level responsibility, but the healthcare system in Sweden is highly decentralized. Healthcare services are overwhelmingly tax financed and the privately financed care is marginal. In relation to other countries in Europe, Swedes have good access to care and the country has good medical outcomes and effects as demonstrated by a low infant mortality rate, high survival rate from cardiovascular diseases, and low mortality rate for cancer. Approximately 50,000 people are diagnosed with cancer per year in Sweden and about 50% can be considered cured after treatment. Prostate cancer in men and breast cancer in women are the most common types, representing about 30% of the cases in 2006.

### Bibliography

Socialstyrelsen, National Board of Health and Welfare. (2007). Statistics Sweden. Retrieved May 23, 2008, from <http://www.sos.se>

that are not adequately evaluated (Mock et al., 2007). Given the evidence that patients continue to suffer from symptoms and that barriers still exist, it is important to address these issues before implementing clinical routines that include new interventions. Teams surrounding patients often are comprised of different types of healthcare professionals who all have a role in relieving patients' symptoms. Therefore, the purpose of this study is to describe, from an interdisciplinary perspective, how cancer-related symptoms are assessed and managed in a cancer-care setting and describe the components that influence symptom management.

## Methods

This cross-sectional study used a descriptive design with a qualitative approach.

### Sample and Setting

Information concerning the study and a request to participate were sent out to all nurses and physicians within the oncology and hematology department at a university hospital in western Sweden. Physical therapists, medical social workers, dieticians, and occupational therapists who cared for patients with cancer in the same hospital also were sent the same information and request. The respondents had to be clinically active and involved in the care of patients with cancer-related symptoms. Those interested in participating contacted the research group for further information. Participation in the study was based on willingness and the researchers guaranteed respondents that data would be handled confidentially. Three distinct groups of respondents were separately interviewed: nurses, physicians, and a mixed group of physical therapists, dieticians, occupational therapists, and a medical social worker. The group setting was recommended in the literature to encourage lively debate without repressing individual respondents' participation and interaction (Krueger & Casey, 2000; Morgan, 1998). All interviews took place in the oncology department.

## Procedure

Data were collected through semistructured interviews of focus groups. Focus groups are a specific interview method used to gather qualitative data and describe the attitudes and issues facing a group by exploring respondents' thoughts, experiences, opinions, and priorities regarding a particular subject (Kitzinger, 1995; Krueger & Casey, 2000; Traulsen, Almarsdottir, & Bjornsdottir, 2004). The opinions often are formed and expressed through interaction with others (Morgan, 1988). The purpose and process of the focus groups were described to the respondents at the beginning of the interview. The discussion was directed using an interview guide prepared according to Krueger and Casey and consisted of opening, introductory, transitional, key, and ending questions (see Figure 1). The interview guide was altered after the first group interview because two questions needed clarification regarding how symptoms were assessed, managed, and evaluated in general. The group discussions lasted 50–75 minutes and were tape-recorded and transcribed.

## Data Analysis

The gathered data were analyzed in accordance with qualitative content analysis (Krippendorff, 1980; Weber, 1990). The interviews were read and reread and then broken down into units that were condensed, abstracted, and labeled with a code (Graneheim & Lundman, 2004). The codes were then sorted into categories and themes within the data were identified by integrating the different categories (Krippendorff). The categories and themes that emerged were discussed throughout the analysis process by all researchers to strengthen the value of how data were categorized and confirmed (Graneheim & Lundman, 2004; Krippendorff).

## Results

A breakdown of the sample can be found in Table 1. Each focus group contained three to five respondents who had a mean of 11 years of experience in cancer care. Eight groups were conducted. Physicians were the most difficult group to recruit, resulting in only two small groups. Three healthcare professionals could not take part in any scheduled group discussions because it was difficult to schedule good times

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- What are, according to you, the most common cancer-related symptoms?
  - How much of your time do you spend managing symptoms?
  - How do you view your role in symptom management?
  - What are the roles of your coworkers on the team?
  - What are the goals of symptom management?
  - Who determines these goals?
  - How is good or poor symptom management acknowledged?
  - Why and when are symptoms assessed?
  - How are symptoms assessed?
  - How are symptoms managed?
  - How are symptoms evaluated?
  - What is the assessment of symptoms based on?
  - Is there any group of patients that gets more attention when it comes to symptom management?
  - What are the conditions for achieving effective symptom management?
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**Figure 1. Interview Guide Components That Influence Symptom Management**

for the group meetings. The group leaders' role in the current study was to ensure that respondents discussed symptom management and to encourage the discussion to go into more detail. Of the eight groups held, seven were moderated by the same person, increasing reliability.

Analysis of the focus group transcripts generated four themes relating to the process of managing cancer-related symptoms. Each theme consisted of different categories (see Figure 2). Two themes were related to the interaction between patients and clinicians—being able to create a relationship with the patient and clinicians' understanding of the patient. One theme related to assessing the symptoms and another to cooperating as a team.

## Creating a Relationship

For effective symptom management, focus group respondents expressed the importance of creating a relationship with each patient. Objectives that were identified as important for the ability to create such a relationship included availability, creating confidence when caregiving, validating patients' symptoms, giving individual care, and having patients participate in their care process.

**Availability:** Respondents expressed the importance of being available for patients, a belief grounded in the fact that patients wanted to have easily accessible care. Nurses indicated that they must be available and demonstrate this availability by giving patients attention even if they did not request it. Time constraints made it difficult to assess all patients' symptoms, and quiet patients might suffer more because they might be overlooked when nurses prioritize work. Assessment and symptom management might not be complete or optimal if the patient had an unscheduled arrival at the hospital or—as was expressed in group discussions—“if it was Friday afternoon.” The respondents also believed that patients often observed if healthcare providers were in a hurry and, consequently, became quieter because they did not want to create inconvenience.

Good symptom management is characterized by us being available. I think that it is a good idea to go around with the patients without having a specific agenda, because that's when they talk about their symptoms.

The patients feel like, “Oh, I can't bother them. They seem to have so little time.”

**Creating confidence when caregiving:** Respondents expressed that patients needed to feel confident to express how they were feeling. Such confidence was believed to reduce the number of symptoms and the intensity of symptoms that patients presented. The first meeting between patients and the healthcare team was acknowledged as being crucial in creating a confident relationship. Detrimental factors included there being no bed or room available, so the first conversation or meeting between the patient and clinical caregiver had to, for example, take place in a storage room. Respondents believed that this made patients feel less confident in their planned care.

Patients experience fewer symptoms if they feel confident.

You may have to chat with the patient inside a store room or something—it's just awful.

**Table 1. Demographic Data**

Professional Category	Focus Group	Group Size	Years in Cancer Care <sup>b</sup>
Nurses	1	4	4–10
	2	4	1–10
	3	4	2–17
Physicians	1	3	15–21
	2	3	1–27
Mixed professions <sup>a</sup>	1	4	4–10
	2	5	5–35
	3	4	4–27

<sup>a</sup> Includes physical therapists, a medical social worker, dietitians, and occupational therapists

<sup>b</sup>  $\bar{X}$  = 11 years of cancer care (1–35)

N = 31

**Validation:** Throughout the interviews, participants acknowledged the importance of validating patients' symptoms by indicating that symptoms were open for discussion. Respondents noted that patients felt some satisfaction with symptom management even if treatment could not be given or was not successful, as long as patients had an opportunity to describe and discuss their symptoms.

Patients' symptoms need to be acknowledged.

Sometimes you can't alleviate the symptom, but at least the patient feels that someone has tried.

**Individual care:** Respondents believed that the effects of a symptom on an individual were related to patients' preferences and environment. This made symptom management difficult, and it was not until a patient was approached as an individual that the management of a specific symptom could be determined. By getting to know each patient as an individual, clinicians could better understand each person and his or her reactions as patients and could, therefore, better assess the symptoms. Experiencing symptoms occurred over time and patients had to feel and express what a specific symptom meant to them. Respondents also said that being responsible for specific patients facilitated the giving of individual care, which, in turn, facilitated understanding of patients' daily lives, making management more effective. Physicians believed that they did not gain the same access to patients and their symptom experience as other clinicians because patients were frightened that the physicians might withhold treatment if they complained too much.

You might think that the goal is one thing when you go in to see the patient, but then you find out that it's something else entirely, or something more.

It's a longer process with the patient, to get the patient to consider “What does this mean for me?”

**Participation:** To effectively manage symptoms, respondents believed patients should actively participate in the treatment strategy even if the respondents found it more difficult to treat a symptom when treatment depended on patients' participation (e.g., in managing cancer-related fatigue). Respondents believed that patients wanted to participate in their symptom management. Respondents



acknowledged patients' own resources and allowed them the opportunity to control and manage their symptoms themselves. Having patients participate could be obstructed by a patient's belief that a symptom was not serious or that a symptom was affecting them and that they lacked the strength to report or manage it. In addition, patients might not mention specific symptoms if they thought that they were simply an inherent part of having cancer or of the treatment given.

You have to get the patient with you the whole way, otherwise it becomes difficult.

It's great if they themselves start in with some sort of self-treatment and establish a bit of personal control because I think it makes them feel very good to do that.

Understanding of the Patient

Respondents' understanding of their patients affected the symptom management process. This understanding was influenced by the clinicians' competence and by their values in relation to patients' health and illness.

**Competence:** Clinicians' competence encompassed education, professional experience, and self-knowledge. Respondents used their education and experience when assessing and evaluating symptoms and gave examples to the patients to validate their symptoms. A lack of experience was acknowledged as a possible way clinicians could overlook certain symptoms.

You have to have a degree of maturity to be able to deal with people.

It takes professional know-how and experience to be able to manage symptoms.

**Values:** Respondents acknowledged that symptom management was affected by patients' demographic categories

(e.g., the younger the patient, the better the symptom management). Respondents were more emotionally affected by younger patients and, therefore, would devote more attention to them. Older patients were not prioritized and the general consensus was that older patients generally did not claim or expect more than they got. Women were regarded as more likely to get more attention than men, and respondents suggested that men tended to not describe their symptoms. Patients requesting a lot of attention tended to get more. Quiet patients, in contrast, often did not get the same amount of attention when there were time constraints. It could be that patients who call for more attention also need it, but it also was acknowledged that quiet patients may simply be suffering in silence. Some clinicians believed that patients who witnessed a fellow patient calling for and getting more attention did not ask for attention because they felt that the other patient needed it more. It was emphasized that patients with higher education got more attention and clinicians were more anxious to meet patients' needs if patients had next of kin who were active and involved in caregiving. Patients who spent more time in the hospital got more attention than patients who spent little time in the hospital. Symptom management also was influenced by patients' diagnoses and treatment. It was acknowledged that patients with breast cancer, as a group, were given more attention, as were patients with rare diagnoses and intense treatments. In addition, the focus of a particular profession, the specialty of the ward where the patient was admitted, and the particular interests of clinicians could influence the questions clinicians asked patients and the symptoms they were informed about.

Patients who have articulate relatives actually get more attention.

Older patients who don't say anything and have no relatives are, indeed, the ones who do not get prioritized.

If a nurse is concerned with nausea or thinks that it is important not to feel tired, then those are the symptoms she will focus on.

Assessing the Symptom

**Assessment methods:** Respondents assessed patients' symptoms and evaluated the effect of interventions by interviewing patients. This conversation had many functions: It was a way of creating a relationship, an opportunity to assess and evaluate symptoms, and an opportunity to offer advice and education. The symptoms' presence and impact on each patient were assessed by asking patients about their daily lives and how the symptoms affected it. Respondents explained that the symptom patients first mentioned generally was the most distressing one and often was the first addressed.

Most respondents assessed symptoms based on their experience and routines and reported no standardized tools for assessment, treatment, or evaluation. Respondents suggested that symptom management be more systematic and that all healthcare professionals should follow the same routines. Lack of standardization (e.g., personal judgments, routines) could complicate an agreement on what methods to use to identify and evaluate symptoms.

Respondents also said that asking too many questions only worried patients. It was often assumed that the

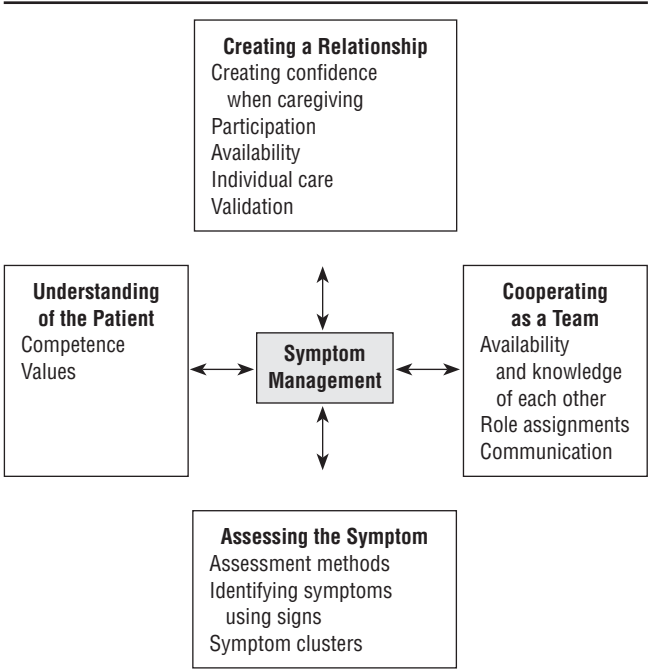


Figure 2. Components That Influence Symptom Management

symptom improved if the patient did not mention it again. However, respondents acknowledged that simply listening to patients' experiences provided an inadequate basis for evaluating a symptom's affect because patients could be influenced by various factors that caused them not to report symptoms. The use of scales for measuring food and drink intake and patient weight also was mentioned for managing symptoms.

Although objectives were said to govern symptom management, they were neither articulated nor written down when it came to evaluating symptoms. Short-term symptom management objectives were more obvious than long-term objectives and often were described by the respondents as ways to prevent, relieve, and treat symptoms and enhance patients' quality of life. Respondents differed as to whether the objectives were the patients', the clinicians', or those articulated in various clinical guidelines. Evaluations of objectives often were based on "soft" data and were related to patients' satisfaction with their situation.

There are no tools for what you ask about each time [you attend to a patient]. It's more about how they are feeling in general.

I talk about whatever the patient brings up with me.

There was an attempt to get the nurses to fill out screening lists, but it wasn't possible to get everyone to agree to that.

**Identifying symptoms using signs:** Obvious, visible symptoms were easier to identify and assess because the patients could not hide them; such symptoms included those that affected the skin and those that were more evident in the daytime than at night. Clinicians observed how patients moved and appeared and saw these traits as signs of symptoms. Clinicians said that physical symptoms were easier to assess than psychological ones (e.g., anxiety) and acknowledged that assessment started with physical symptoms before moving to psychological ones. In addition, with respect to patients' privacy clinicians were very tentative in assessing symptoms related to sexuality, and such symptoms were ignored in many cases for that reason. Physicians believed it was important to identify which symptoms were caused by the cancer and which were caused by the cancer treatment because they felt it was easier for patients to cope with a symptom caused by the treatment. When clinicians did not have a treatment for a particular symptom, the assessment was not as good.

If a symptom is not as detectable during the day as it is at night, it doesn't attract as much attention.

It is usually easier to talk about the physical component, which is not as highly charged.

You have to ask things in a slightly round-about way to protect the patient's integrity.

**Symptom clusters:** The respondents expressed that cancer-related symptoms never appeared alone, which made the recognition of individual symptoms difficult. Respondents believed that symptoms, in one way or another, were related to each other but that it was important to try to identify the individual symptoms within a cluster. Treatments were tailored to individual symptoms with the belief that treating one

symptom would positively affect other symptoms. Multiple symptoms were seen as a complex situation.

It can be difficult in many cases to discern what is what. It might be pain, depression, tiredness, and all sorts of things, and you may have made a token effort, but the patient still feels better in all respects.

## Cooperating as a Team

The importance of working in a team and of assessing and treating symptoms from an interdisciplinary perspective was highlighted. Working as a team meant that one professional could alert another professional about symptoms that the professional had developed a particular awareness of. This study uncovered a theme that emphasized availability and knowledge about each team member, communication, and role assignments within the team.

**Availability and knowledge of each other:** For cooperation to work in a team, the different professions involved had to remain accessible and visible to each other. If the members of the team understood the role of each professional, symptom management ran more smoothly and routines could be followed. Symptom management often became compromised as soon as there was a change of personnel. In addition, professionals needed to keep each other informed so they could assess and meet the needs of patients who needed help from several professions. Respondents acknowledged that patients often did not know what sort of help they needed, and it was emphasized that when routines governing when different professionals should be called in are not available, the request for assistance might come too late or not at all, jeopardizing effective symptom management.

Someone else takes the initiative, and by then it is often very late. I believe that a whole lot depends on how available we [physical therapists, dieticians, and occupational therapists] are on the wards. How easy it is to ring and have us come. It also depends on how aware the nurse responsible for the patient is, above and beyond just knowing what they're supposed to do.

**Communication:** The respondents called for more and better communication and discussion regarding symptom management among professionals on the team. The analysis indicated that there was no structure for the communication between professionals and systematic documentation was lacking. In addition, certain phrases carried different meanings for the respondents, which could negatively affect symptom management.

The best thing is when you can have teamwork, so that you can discuss things. "If [the record] says, 'The patient feels pretty good,' or 'has a bit of pain . . .,' how are you supposed to interpret that?"

**Role assignments:** Respondents believed that clear roles, in terms of symptom management within the cross-professional team, did not exist. Many expressed the sense that symptom management was everyone's responsibility and that everyone assessed, treated, and evaluated different symptoms. Nurses, however, said that they were the ones most often available to patients and that they were the ones who detected symptoms and initiated contact with other professionals as needed. Nurses often regarded physical therapists, medical social workers, dieticians, occupational therapists, and physicians only as treating professionals, although those healthcare professionals

believed they assessed, treated, and evaluated symptoms. Nurses prioritized symptom management in end-of-life care whereas physical and occupational therapists prioritized symptom management in patients who were planning to go home. Nurses saw themselves as responsible for collecting information from patients and then documenting and discussing it with physicians. Assistant nurses<sup>1</sup> were acknowledged as playing an important part in symptom management, for example, by detecting and treating symptoms. Nurses with relatively little professional experience relied greatly on assistant nurses. Physical therapists, dieticians, and occupational therapists said that it often was the assistant nurses who were actually involved in treatment and that nurses often were contacted only to report on how symptom management had progressed.

After all, it's everyone's responsibility to talk about what they see and what they hear.

The assistant nurse comes along and takes care of the patient and the nurse is more of a reporter.

## Discussion and Implications for Practice

Although this study was conducted within a specific context and culture of care, it highlights components that can provide additional knowledge surrounding the symptom management issue. Among the themes found, creating a relationship was one seen as essential for effective symptom management. The relationship and interaction between clinicians and patients and patients' participation in their treatment have been highlighted as important components of symptom management (Haworth & Dluhy, 2001; Randall-David, Wright, Porterfield, & Lesser, 2003) as well as important factors in facilitating adherence to management strategies (World Health Organization [WHO], 2003). Patients have expressed that a good relationship promotes patients' participation in the care provided and patients expect the clinicians to encourage them to participate (Sainio, Lauri, & Eriksson, 2001). Sainio et al. showed that patients would avoid "bothering" clinicians if they could tell that the staff was working under time constraints. In the current study, symptom management was acknowledged as a process that unfolds over time as patients grasp the meaning of a symptom before management is successful, a theme that is consistent with the literature on symptom experience (Armstrong, 2003; Haworth & Dluhy). Individual care is the goal, but individualized care also can be regarded as an impediment because it can hinder the application of standardized assessment tools. The current study's findings showed that different patients were understood in differing ways, indicating that the use of evidence-based routines (e.g., assessment scales) would address that specific issue. Clinicians' varied ways of understanding different patients must be acknowledged and discussed openly and frequently in various clinical settings and in educational aims.

Symptoms were mostly assessed through patient interviews, clinicians' experiences and education, and respondents experiences. Several respondents observed that the symptom patients first mention often is the most distressing one and that obvious physical symptoms were the easiest to manage. If no symptom assessment routines are used, patients have

to decide what symptoms to report, which involves many inherent flaws (Anderson et al., 2002; Johnson et al., 2005; Passaik et al., 2002; Stone et al., 2000; Stromgren et al., 2001; Yates et al., 2002). Unstructured assessments must be regarded as a major barrier to optimal symptom management because an unrecognized symptom is an untreated symptom. Multiple studies imply the importance of using assessment tools (Heedman & Strang, 2003; Stromgren et al.) and the need to ask about symptoms (Passik et al.).

It also has been shown in Magnusson, Moller, Ekman, and Wallgren (1999) that patients, in many cases, refer to their daily life to explain the impact of symptoms.

In addition, respondents' experiences indicated that symptoms appear in clusters, which makes management more difficult. Future research into cancer-related symptoms must consider symptom clusters (Dodd, Miaskowski, & Paul, 2001; Miakowski, Dodd, & Lee, 2004). Exploring symptom clusters can offer guidance in how to identify and assess multiple cancer-related symptoms and how to effectively intervene against multiple symptoms.

Clear roles in symptom management often were not set forth within the interdisciplinary team, and multiple factors affected teamwork, creating ineffective and less-than-optimal symptom management because the evaluation is jeopardized and some professions may not get involved in patient care. The current study's results indicate that nurses, physical therapists, dieticians, occupational therapists, and medical social workers should assess and evaluate symptoms because patients can be hesitant to acknowledge the affect of symptoms to their physicians (Lin, 2000; Potter, Wiseman, Dunn, & Boyle, 2003; Randall-David et al., 2003). In addition, assistant nurses are deeply involved in symptom management and should be acknowledged as part of the team.

The Conceptual Model of Symptom Management (Dodd, Janson, et al., 2001) encompasses symptom management strategies. This model takes three interrelated dimensions into consideration: symptom experience, symptom management strategies, and symptom outcomes. Components of symptom management strategies and adherence to symptom management strategies are two dimensions relevant to the results of this study. Components of symptom management strategies are factors to be considered when designing, delivering, and prescribing interventions to achieve a desired outcome; adherence to a chosen intervention can be influenced by different factors that can affect the desired outcome. Studies on the issue of adherence have investigated, from patients' perspectives, what extent patients adhere to different prescribed treatments, why patients do not adhere, and what interventions help patients to follow treatments. But the results of the current study show that healthcare professionals and the healthcare system also have to take responsibility for adherence. Acknowledged issues in symptom management, such as creating a relationship with the patient, teamwork, and the clinician's understanding of the patient's symptoms, can facilitate the patient's adherence and alleviate their symptoms.

WHO (2003) acknowledged that the issue of adherence must be looked at from healthcare professional and healthcare system perspectives as well as from patient perspectives.

## Limitations

The focus group interview method was chosen because the current study's goal was to understand the symptom

<sup>1</sup>An assistant nurse is defined by the author as one who has no university degree, helps the patients with daily care, can measure blood pressure, gives subcutaneous injections, and takes blood samples.



management process. The method made it possible to identify factors affecting the creation of relationships as well as factors concerning the clinicians' understanding of patients. The voluntary nature of study participation meant that respondents involved in the focus groups might be more motivated than if random sampling had been used, but it also did not provide as many respondents as the authors wished for (Krueger and Casey [2000] recommend four to six respondents for each group). However, the voluntary nature meant that respondents had a genuine interest in symptom management, many years of experience, and could relate to the symptom management process. Despite using a moderator to encourage the involvement of every group member, the focus group dynamic may have favored the group norm and silenced individual voices (Kitzinger, 1995).

## Conclusions

The current study's findings highlight, from an interdisciplinary perspective, various components that affect symptom management. Unstructured routines for manage-

ment are common. Enhancing symptom management not only is a matter of implementing clinical guidelines but also a matter that must be preceded by teamwork, assessment and evaluation method discussions, and the ability to create a relationship with patients in the interest of enhancing symptom management. The results of this study could help clarify different clinicians' roles in the team and, therefore, improve symptom assessment and management. In addition, educational programs for clinicians about symptom alleviation should include the issue of different possible barriers to symptom management. Nurses should be aware of their value and of how their understanding of patients affects their assessment of patients' symptom experiences. The issue of adherence should be explored more fully, both from the clinicians' perspective and from the patients' perspective. Further quantitative research is planned to address highlighted components when implementing guidelines for managing cancer-related fatigue.

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## References

- Ahlberg, K. (2004). *Cancer-related fatigue: Experience and outcomes*. Goteborg, Sweden: Goteborg University.
- Ahlberg, K., Ekman, T., Gaston-Johansson, F., & Mock, V. (2003). Assessment and management of cancer-related fatigue in adults. *Lancet*, 362(9384), 640–650.
- Anderson, K.O., Richman, S.P., Hurley, J., Palos, G., Valero, V., Mendoza, T.R., et al. (2002). Cancer pain management among underserved minority outpatients: Perceived need and barriers to optimal control. *Cancer*, 94(8), 2295–2304.
- Armstrong, T.S. (2003). Symptoms experience: A concept analysis. *Oncology Nursing Forum*, 30(4), 601–606.
- Burrows, M., Dibble, S.L., & Miaskowski, C. (1998). Differences in outcomes among patients experiencing different types of cancer-related pain. *Oncology Nursing Forum*, 25(4), 735–741.
- Cleland, C.S. (1987). Barriers to the management of cancer pain. *Oncology*, 1(2, Suppl.), 19–26.
- Dawson, R., Sellers, D.E., Spross, J.A., Jablonski, E.S., Hoyer, D.R., & Solomon, M.Z. (2005). Do patients' beliefs act as barriers to effective pain management behaviors and outcomes in patients with cancer-related or noncancer-related pain? *Oncology Nursing Forum*, 32(2), 363–374.
- Di Maio, M., Gridelli, C., Gallo, C., Manzione, L., Brancaccio, L., Barbera, S., et al. (2004). Prevalence and management of pain in Italian patients with advanced non-small cell lung cancer. *British Journal of Cancer*, 90(12), 2288–2296.
- Dodd, M.J., Janson, S., Facione, N., Faucett, J., Froelicher, E., Humphreys, J., et al. (2001). Advancing the science of symptom management. *Journal of Advanced Nursing*, 33(5), 668–676.
- Dodd, M.J., Miaskowski, C., & Paul, S.M. (2001). Symptom clusters and their effect on the functional status of patients with cancer. *Oncology Nursing Forum*, 28(3), 465–470.
- Farrell, C., Heaven, C., Beaver, K., & Maguire, P. (2005). Identifying the concerns of women undergoing chemotherapy. *Patient Education and Counseling*, 56(1), 72–77.
- Fleishman, S. (2004). Treatment of symptom clusters: Pain, depression, fatigue. *Journal of the National Cancer Institute. Monographs*, 32, 119–123.
- Fu, M.R., LeMone, P., & McDaniel, R.W. (2004). An integrated approach to an analysis of symptom management in patients with cancer. *Oncology Nursing Forum*, 31(1), 65–70.
- Glover, J., Dibble, S.L., Dodd, M.J., & Miaskowski, C. (1995). Mood states of oncology outpatients: Does pain make a difference? *Journal of Pain and Symptom Management*, 10(2), 120–128.
- Graneheim, U.H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures, and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112.
- Haworth, S.K., & Dluhy, N.M. (2001). Holistic symptom management: Modeling the interaction phase. *Journal of Advanced Nursing*, 36(2), 302–310.
- Heedman, P.A., & Strang, P. (2003). Pain and pain alleviation in hospital-based home care: Demographic, biological, and treatment factors. *Supportive Care in Cancer*, 11(1), 35–40.
- Johnson, D.C., Kassner, C.T., Houser, J., & Kutner, J.S. (2005). Barriers to effective symptom management in hospice. *Journal of Pain and Symptom Management*, 29(1), 69–79.
- Kitzinger, J. (1995). Qualitative research: Introducing focus groups. *BMJ*, 311(7000), 299–302.
- Krippendorff, K. (1980). *Content analysis. An introduction to its methodology*. Beverly Hills, CA: Sage.
- Krueger, R., & Casey, M.A. (2000). *Focus groups. A practical guide for applied research* (3rd ed.). Thousand Oaks, CA: Sage.
- Lin, C.C. (2000). Barriers to analgesic management of cancer pain: A comparison of attitudes of Taiwanese patients and their family care givers. *Pain*, 88(1), 7–14.
- Magnusson, K., Moller, A., Ekman, T., & Wallgren, A. (1999). A qualitative study to explore the experience of fatigue in cancer patients. *European Journal of Cancer Care*, 8(4), 224–232.
- Miaskowski, C., Cooper, B.A., Paul, S.M., Dodd, M., Lee, K.A., Aouizerat, B.E., et al. (2006). Subgroups of patients with cancer with different cancer experiences and quality of life outcomes: A cluster analysis. *Oncology Nursing Forum*, 33(5), E79–E89. Retrieved May 14, 2008, from <http://ons.metapress.com/content/45j041752130j582/fulltext.pdf>
- Miaskowski, C., Dodd, M., & Lee, K.A. (2004). Symptom clusters: The new frontier in symptom management research. *Journal of the National Cancer Institute. Monographs*, 32, 17–21.
- Miaskowski, C., & Lee, K.A. (1999). Pain, fatigue, and sleep disturbances in oncology outpatients receiving radiation therapy for bone metastasis: A pilot study. *Journal of Pain and Symptom Management*, 17(5), 320–322.
- Mock, V., Atkinson, A., Barsevick, A., Blackwell, S., Cella, D., & Ciano-frocca, M. (2007). Cancer-related fatigue clinical practice guidelines in oncology. *Journal of the National Comprehensive Cancer Network*, 5(10), 1054–1078.
- Morgan, D.L. (1988). *Focus groups as a qualitative research*. Newbury Park, CA: Sage.

- Morgan, D.L. (1998). *Focus group kit. The focus groups guidebook*. Thousand Oaks, CA: Sage.
- Passik, S.D., Kirsch, K.L., Donaghy, K., Holtsclaw, E., Theobald, D., Cella, D., et al. (2002). Patient-related barriers to fatigue communication: Initial validation of the Fatigue Management Barriers Questionnaire. *Journal of Pain and Symptom Management*, 24(5), 481–493.
- Potter, V.T., Wiseman, C.E., Dunn, S.M., & Boyle, F.M. (2003). Patient barriers to optimal cancer pain management. *Psycho-Oncology*, 12(2), 153–160.
- Randall-David, E., Wright, J., Porterfield, D.S., & Lesser, G. (2003). Barriers to cancer pain management: Home health and hospice nurses and patients. *Supportive Care in Cancer*, 11(10), 660–665.
- Sainio, C., Lauri, S., & Eriksson, E. (2001). Cancer patients' views and experiences of participation in care and decision making. *Nursing Ethics*, 8(2), 97–113.
- Schumacher, K.L., West, C., Dodd, M., Paul, S.M., Tripathy, D., Koo, P., et al. (2002). Pain management autobiographies and reluctance to use opioids for cancer pain management. *Cancer Nursing*, 25(2), 125–133.
- Stone, P., Richardson, A., Ream, E., Smith, A.G., Kerr, D.J., & Kearney, N. (2000). Cancer-related fatigue: Inevitable, unimportant, and untreatable? Results of a multicenter patient survey. *Annals of Oncology*, 11(8), 971–975.
- Stromgren, A.S., Groenvold, M., Sorensen, A., & Andersen, L. (2001). Symptom recognition in advanced cancer. A comparison of nursing records against patient self-rating. *Acta Anaesthesiologica Scandinavica*, 45(9), 1080–1085.
- Traulsen, J.M., Almarsdottir, A.B., & Bjornsdottir, I. (2004). Interviewing the moderator: An ancillary method to focus groups. *Qualitative Health Research*, 14(5), 714–725.
- Walsh, D., Donnelly, S., & Rybicki, L. (2000). The symptoms of advanced cancer: Relationship to age, gender, and performance status in 1,000 patients. *Supportive Care in Cancer*, 8(3), 175–179.
- Ward, S.E., Goldberg, N., Miller-McCauley, V., Mueller, C., Nolan, A., Pawlik-Plank, D., et al. (1993). Patient-related barriers to management of cancer pain. *Pain*, 52(3), 319–324.
- Weber, R.P. (1990). *Basic content analysis* (2nd ed.). Newbury Park, CA: Sage.
- World Health Organization. (2003). *Adherence to long term therapies: Evidence for action*. Geneva, Switzerland: Author.
- Yates, P.M., Edwards, H.E., Nash, R.E., Walsh, A.M., Fentiman, B.J., Skerman, H.M., et al. (2002). Barriers to effective cancer pain management: A survey of hospitalized cancer patients in Australia. *Journal of Pain and Symptom Management*, 23(5), 393–405.