Provider Verbal Responses to Patient Distress Cues During Ambulatory Oncology Visits

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Although patients with cancer frequently experience forms of distress, including depression and anxiety, these issues often are under-recognized by healthcare providers. How providers respond to patient distress influences patients' disclosures of concerns. Additional assessment by providers often is needed to identify treatable issues (e.g., educational needs, symptoms of depression) in patients. Providers may use distancing behaviors to decrease patient expressions of emotional concerns, perhaps because of a lack of confidence in handling socioemotional concerns or because of more practical factors (e.g., lack of time). Both acknowledgment and exploration of patient concerns by providers are necessary to adequately assess socioemotional concerns. These provider behaviors may be therapeutic interventions in themselves or may be useful in determining the need for referral and pharmacologic treatment.

This study was a secondary analysis of a subset from a preexisting data set of audio files collected in conjunction with an electronic self-report assessment–cancer (ESRA-C) tool used by patients with cancer to report symptoms and quality-of-life concerns. This data set was collected from 2005–2007 during ambulatory, on-treatment oncology clinic visits. Results revealed that such concerns are addressed significantly more often when providers receive a summary report of the ESRA-C tool prior to the actual visit (Berry et al., 2008). The term "providers" refers to oncology nurses, advanced practice nurses, physician assistants, and oncologists.

The purpose of the current analysis was to identify patient cues of socioemotional concerns and distress, explore provider cue-responding behaviors to patient cues of distress and socioemotional concerns, and examine the effect of an ESRA-C report on provider cue-responding behaviors.

Review of the Literature

Specific provider behaviors are known to influence patient outcomes (i.e., well-being, adjustment, and quality

Purpose/Objectives: To explore healthcare provider cue-responding behaviors to patient cues of distress and socioemotional concerns during ambulatory, on-treatment oncology visits.

Design: Descriptive secondary analysis of a data set of audio recordings of oncology visits and reports of symptoms and quality of life recorded with an electronic self-report assessment–cancer (ESRA-C) tool.

Setting: Comprehensive cancer center, ambulatory care.

Sample: 31 randomly selected cases from an existing data set (with one used as a training tool) of 590 audio recordings of patient-provider communication.

Methods: Patients were placed in Group 1 (n = 20) and Group 2 (n = 10) to explore differences in patient-provider communication and decrease coder bias. Both groups completed the ESRA-C questionnaire prior to the visit. Providers in Group 2 received a printed ESRA-C summary report for use during the visit. Audio files of the visit were coded using the Medical Interview Aural Rating System (MIARS).

Main Research Variables: Patient cues of distress and provider cue-responding behaviors.

Findings: Patient cues of distress and socioemotional concerns ranged from 0–13 cues per visit, with a mean of 4.6 cues per visit. Providers acknowledged 57% of patient cues, but only acknowledged and explored 22% of all patient cues. Providers in Group 2 acknowledged patient concerns more often but explored the concerns less frequently. The number of patient cues *distanced from* by providers was lower in Group 2 and the overall provider score for responsiveness to patient cues of distress was higher, indicating more responsiveness than from Group 1.

Conclusions: The use of a summary report of patient concerns may have enhanced provider responsiveness, in general. Distancing behaviors by providers in response to patient verbal cues may indicate a lack of knowledge, time limitations, or a lack of confidence.

Implications for Nursing: To effectively support patients with cancer through active therapy, a greater level of acknowledgment, exploration, and responsive action by providers is indicated. These findings have implications for provider education, with regard to appropriate responses, and for researchers to test methods that best prompt and support effective provider behaviors, ultimately improving patient outcomes.

of life). In addition, facilitating, exploring, and providing validation of patients' socioemotional concerns can decrease anxiety and distress in patients (Fogarty, Curbow, Wingard, McDonnell, & Somerfield, 1999; Iwamitsu, Shimoda, Abe, Okawa, & Buck, 2005; Zachariae et al., 2003). Acknowledgment and exploration of concerns are necessary to completely assess socioemotional concerns within the context of a life-threatening condition (e.g., cancer, heart disease) (Doering et al., 2009; Maguire, Faulkner, Booth, Elliott, & Hillier, 1996). Provider behaviors may be therapeutic interventions in themselves by facilitating disclosure (Stiles, Shuster, & Harrigan, 1992), or they may determine the need for additional assessment, referral, or pharmacologic interventions. Ultimately, viewing patient-provider communication as a process with predetermined goals directs assessment, treatment, and referral.

The process of communication for healthcare providers and patients should be outcome-driven and encompass a biopsychosocial approach to health care. Patient cues are seen as an important source of information and drive effective communication processes (Hulsman, 2009). For example, a specific goal of identifying treatable depression may be one component of complete assessment when a patient expresses sadness, sleep problems, or changes in appetite and activity levels (Trask, 2004). However, in another scenario, expressions of anxiety during an episode of shortness of breath in a person with lung cancer may be indicative of fear of the unknown or further deterioration in respiratory function and hypoxia. These patient expressions are part of the fuller biopsychosocial perspective and reflect human responses to changes in health and functioning that have implications for selecting the appropriate interventions.

Provider responses to patient concerns are determined by many factors, including the previous experiences of providers and their confidence in exploring socioemotional concerns. Providers may avoid exploration of these concerns or use distancing behaviors to decrease patient expressions of physical symptoms (Berry, Wilkie, Thomas, & Fortner, 2003) and emotional concerns (Wilkinson, 1991) or to decrease their own stress (Butow, Brown, Cogar, Tattersall, & Dunn, 2002). Exploring how providers respond to cues of distress has implications for provider education and patient outcomes.

The Medical Interview Aural Rating System (MIARS) was developed to explore and code provider cue-responding behaviors to patients' expressions of distress (Heaven, 2001; Heaven & Green, 2001; Heaven & Maguire, 1996). In MIARS, a *turn* is used as the unit of observation, and each turn is then coded for the patient and the provider. Patient cues are coded on three levels to record the extent to which feelings or concerns are disclosed: Level 1 (hint at worry or concern), Level 2 (mentions worry or concern), and Level 3 (clear expression of

emotion [i.e., crying]). The provider behaviors are coded for both form and function. The form or morphologic aspects of the turn are defined as a direct open question, a screening question, a negotiation, or a summarization. The function of the provider response would be coded in one of three categories: cue explored, cue acknowledged but not explored, or cue distanced from. A provider score is calculated by totaling provider positive behaviors (defined as acknowledgment plus exploration) minus the number of negative behaviors (defined as times distancing behaviors were used).

Conceptual Model

Increasingly, leaders in communication research are calling for a theoretic basis for research (Bensing, van Dulmen, & Tates, 2003). In oncology, a research agenda has been proposed to uncover the mechanisms that may influence patient health and quality of life (Street, Makoul, Arora, & Epstein, 2009). Determination of specific communication goals and related processes to achieve these goals also is in keeping with general trends in research in healthcare provider communication (Hulsman, 2009).

Responding to patient emotions is one component of a newly developed model to link provider behaviors with outcomes (de Haes & Bensing, 2009). De Haes and Bensing (2009) have integrated aspects of earlier models of medical communication into a six-part model to direct future investigation and education of healthcare providers. Although the model was originally developed to address doctor-patient communication, the steps are useful in clarifying communication strategies for all healthcare providers.

In the de Haes and Bensing (2009) model, specific communication elements are linked to end points and patient-related outcomes with patient health being the ultimate goal. To discover the effectiveness of healthcare communication, end points, particularly patient-related end points, need to be established. In the model, provider communication is linked to patient-related goals and immediate, intermediate, and long-term end points.

Within this model, the sixth function is responding to patient emotions. The goals of this function are to support the patient, enhance communication, and provide referral where needed. The immediate end points include clinician explorative skills and patient expression of emotion. The intermediate and long-term end points include patient sense of support, patient emotional adjustment, and decreased psychological distress. De Haes and Bensing (2009) noted that both time constraints and costs are factors in the end points for this step.

The de Haes and Bensing (2009) model is useful in exploring provider responsiveness to patient cues of distress and establishing end points for this communication. Because clinician-explorative skills are instrumental in achieving the patient-related end points, additional

definition of the specific skills that acknowledge and explore patient socioemotional concerns is necessary. This analysis explored provider cue-responding behaviors to patient expressions of distress and concerns as a first step in identifying specific communication skills that may be amenable to provider education. Clarifying the process of communication and identifying specific outcomes for the process has implications for provider education regarding effective communication behaviors.

Methods

This study was a secondary analysis of a random sample of 31 audio files recorded during ambulatory, on-treatment oncology clinic visits with 590 patient participants. Each audio file contained an entire visit. All participants had completed the ESRA-C, and the provider had a summary report of the patient self-report during 10 of the recorded visits, whereas, during the other 21 visits, no summary was delivered. After discarding one audio file used for training the coders, the final sample for coding with MIARS contained 30 audio files. By listening to the recordings, patterns of patient disclosure of concerns, as well as provider facilitation of concerns and provider acknowledgment and exploration of these concerns, were coded for form and function. For example, the provider could facilitate the patient's disclosure of socioemotional concerns with an open-ended question, or the patient might try to initiate a conversation by disclosing a specific concern. In addition to the audio files, the ESRA-C data set contained demographic information (age, gender, diagnosis) and a time stamp for discussions regarding socioemotional concerns. Although the original audio files were time stamped for these conversations, the coders listened to the entire audio file to capture all patient cues of concerns as well as provider facilitations and responses. In addition, the two coders independently coded six of the audio files, and intraclass correlations were calculated to explore inter-rater reliability.

Sample

The sample included patients with various cancer diagnoses and treatments. The audio files were de-identified and the educational preparation or licensure of the providers was not identifiable from the audio files. Demographic characteristics for patients (age, gender, diagnosis) and the time stamp for discussions of socioemotional concerns from the audio files were derived from the original data set.

Analysis

Descriptive statistics were used to analyze the demographic characteristics of the sample as well the provider behaviors and responses. Frequencies of MIARS codes were used to analyze the level of patient cues and the number of provider facilitations per audio file. Frequencies and percentages were used to analyze provider responses to patient cues (acknowledged but not explored, acknowledged and explored, and cues distanced from). An overall provider score for responsiveness was calculated for each audio file by subtracting negative behavior (cues distanced from) from positive behaviors (acknowledged and explored), with lower scores indicating lower provider responsiveness to patient concerns (Heaven & Green, 2001). Verbatim transcriptions of patient and provider verbal responses during discussions of socioemotional concerns were reviewed to provide additional depth to the analysis.

Results

The subset consisted of 18 women and 12 men (after one audio file was used for training purposes), with a mean age of 52.5 years, similar to the mean age of the original data set (see Table 1). The demographics of the subset used for secondary analysis included more women than the original study. The intraclass correlation was calculated at 0.83 for the six double-coded files, indicating adequate inter-rater reliability (Griffin & Gonzalez, 1995; Shrout & Fleiss, 1979).

Provider Facilitations

The number of provider facilitations of patient concerns ranged from 0–6 times per visit, with a mean of 1.9 facilitations. A provider facilitation was defined as a question from the provider regarding patient socioemotional concerns, ranging from general to specific questions (e.g., about the patient's visits to a psychologist; a finding on the ESRA-C summary report). General questions included,

Table 1. Demographic Characteristics

Characteristic	Subset (N = 31)			Original Data Set (N = 660[a])		
	$\overline{X}$	SD	Range	$\overline{X}$	SD	Range
Age (years)	52.5	12.9	20–83	54.14	13.9	18–89
Characteristic	**n**	**%**		**n**	**%**	
Gender[a]						
Male	12	39		326	55	
Female	19	61		264	45	
Group						
1 (Control)	20	65		333	50	
2 (ESRA-C report)	11	35		327	50	

[a] 660 patients completed ESRA-C in original data set, 590 on-treatment audio recordings were evaluable, and 70 audio recordings were not completed because of missing or faulty recordings.

ESRA-C—electronic self-report assessment–cancer

"How are you doing?" and "How about other issues or concerns you want to cover today besides the shots?" General open-ended questions included, "Doing okay?" "Anything else?" and "Your mood?" Finally, specific questions included, "There was something concerning on your survey. Can you talk about it?" and "Do you feel like you are depressed?"

Patient Cues

The number of patient cues of socioemotional concerns ranged from 0–13 cues per visit with a mean of 4.6 cues per visit (see Table 2). Providers acknowledged 57% of patient cues of socioemotional concerns; however, they only explored 22% of these cues.

Patient cues of socioemotional concerns in the audio files ranged from subtle (Level 1) to overt (Level 3). For example, Level 1 clues included, "I've had a harder time with this one," and, "I'm starting to get tired of everything going on." More overt clues were coded as Level 2, and ranged from, "I think there's some depression that comes with the disease, you know, living with it," to, "I feel a little panicky; I just start worrying about things . . . I feel shaky . . . I just start getting worked up about things." At least 6 of the 30 patients could be heard crying during their visits (Level 3). The mean number of patient cues was similar in the two groups (Group 1: $\overline{X}$ = 4.7 cues per audio file, SD = 3.5; Group 2: $\overline{X}$ = 4.5 cues per audio file, SD = 3).

Provider Responses

The percentage of provider acknowledgments of patient cues was higher in Group 2 (62% of patient cues) than in Group 1 (55% of patient cues). The following is an example of cues acknowledged but not explored by the provider.

Patient: I'm gonna run out of luck is all I think. I have had a whole bunch of these [problems].
Provider: I know, I know. People get through it.
Patient: I'm not at my lowest, but I get a lot of the "hopeless, what's the use" feeling.
Provider: Uh-huh.

Although providers in Group 2 were more apt to acknowledge the patient cues, they were less likely to explore the concerns (i.e., ask open-ended questions, ask screening questions, and summarize patient concerns) (11% in Group 2 versus 26% in Group 1) (see Table 3). The following is an example of cues acknowledged and explored.

Provider: Besides the diarrhea, is there anything specifically you have noticed that's new?
Patient: I've always had mood swings, so I can't tell if they are more severe or not.
Provider: Okay. But it's definitely something you are noticing now? Are you feeling much more depressed than usual?

The number of cues distanced from, considered a negative provider behavior in MIARS, was lower in Group 2 (13%) compared with Group 1 (21%). An example of cues distanced from follows.

Patient: And I haven't slept for three to four years.
Provider: And your cough?
Patient: Now the Lexapro® [Forest Laboratories], you know, I've been on the 10 mg and the Celexa® [Forest Laboratories] 40 mg. I really think I need to be on Lexapro® 20 mg. I think the Lexapro® 20 mg seems to be the best.
Provider: Okay . . . all right . . . [outside conversation]. Okay, we'll make the switch then. I'll give you oxycodone and Oxycontin® [Purdue Pharma].

Discussion

Although the ESRA-C summary report for providers is known to increase the frequency with which cancer symptoms and quality-of-life concerns are discussed during on-treatment visits in ambulatory cancer care centers (Berry et al., 2008), this analysis extends the authors' understanding of the conversations that occur relevant to socioemotional cues.

The summary report may have increased provider acknowledgment of socioemotional concerns during oncology visits. It also may be that the summary report improved providers' overall responsiveness to patient cues as demonstrated by the higher provider scores for Group 2. In Uitterhoeve et al. (2007), verbal distancing by providers was seen in 48%–50% of responses to patient cues using MIARS to code patient-provider communication.

However, ESRA-C summary reports did not necessarily increase provider exploration of patient socioemotional concerns,

Table 2. Medical Interview Aural Rating Scale for Patient Cues and Healthcare Provider Cue-Responding Behaviors

Behavior	Range	$\overline{X}$	Median	Mode	SD
Patient cues	0–13	4.6	4	2	3.3
Provider facilitations	0–6	1.9	1	1	0.9
Patient cues acknowledged and explored	0–3	1	1	1	0.9
Patient cues acknowledged but not explored	0–7	2.6	2	2	1.9
Patient cues distanced from	0–5	0.8	1	–	1.2
Provider score[a]	–4–3	0.3	1	1	1.6

N = 30

[a] Provider score is positive behaviors (acknowledgment plus exploration) minus negative behaviors (distancing from patient cues) with higher scores indicative of more provider responsiveness to patient cues.

even when provided with a prompt. The findings are similar to those in Uitterhoeve et al. (2007), in which nurse providers explored 32% of patient cues. As noted in the de Haes and Bensing (2009) model, responding to patient emotions is linked to specific end points: patient emotional adjustment and decreased psychological distress. To diminish distress, providers should acknowledge and explore patient cues to identify treatable issues. Communication skills that explore patient concerns may include supporting the patient, enhancing patient disclosure of concerns, or referral for further treatment and counseling. Clinician explorative skills are specifically addressed within the model as a necessary endpoint in attaining the goal of patient emotional adjustment (de Haes & Bensing, 2009).

Limitations

The limitations of this study include a small sample size, limited age diversity, and more women than men in the sample. These factors all affect the ability to make generalizations of the results. The secondary analysis was not designed to test differences in the groups, and the resulting differences may have been by chance. However, the findings do suggest that additional study is warranted.

Implications for Nursing

Identifying the process and outcomes of patient-provider communication has implications for healthcare provider education. It may be that the specific communication skills that are necessary to effectively respond to patients' socioemotional concerns should be introduced during educational preparation of healthcare providers or during continuing education for practicing clinicians. Patient disclosures of concerns often emerge spontaneously during routine healthcare encounters, as part of the human response to changes in health, particularly when patients have potentially life-threatening conditions. When healthcare providers are prepared in advance, these unexpected disclosures can be addressed and explored more fully without provider distancing behaviors that stop disclosure, redirect the conversation, or attempted to decrease situational discomfort.

Training in communication skills has been incorporated into fundamentals of nursing education and also integrated into postgraduate education for physicians, fellows (Back, Arnold, Talk, Baile, & Fryer-Edwards, 2003), and practicing nurses (Kruijver et al., 2001; Wilkinson, Bailey, Aldridge, & Roberts, 1999). Integration of communication scripts has been used in medical education to develop clinical-reasoning skills (Charlin, Tardif, & Bozhuizen, 2000). A solution-focused training in communication skills has been studied with practicing nurses, and improvement was noted in willingness to communicate with challenging patients and

Table 3. Medical Interview Aural Rating Scale for Patient Cues and Healthcare Provider Responding Behaviors by Group

Variable	Overall (N = 30)	Group 1 (n = 20)	Group 2 (n = 10)
Patient cues			
$\overline{X}$	4.6	4.7	4.5
SD	3.3	3.5	3
Provider facilitations			
$\overline{X}$	1.9	1.9	1.7
SD	0.9	1.8	1.5
Patient cues acknowledged and explored			
$\overline{X}$	1	1.2	0.5
Ratio	1:4.6	1.2:4.7	0.5:4.5
%	22	26	11
Patient cues acknowledged but not explored			
$\overline{X}$	2.6	2.6	2.8
Ratio	2.6:4.6	2.6:4.7	2.8:4.5
%	57	55	62
Patient cues distanced from			
$\overline{X}$	0.8	1	0.6
Ratio	0.8:4.6	1:4.7	0.6:4.5
%	17	21	13
Provider score	0.3	0.4	1

Note. Ratio equals the mean number of provider behavior to the mean number of patient cues. Provider score equals positive behaviors (acknowledgment plus exploration) minus negative behaviors (distancing from patient cues).

Note. Group 1 is control. Group 2 providers received an electronic self-report assessment–cancer summary report for use during the patient's visit.

decreased stress and feelings of inadequacy in nurses (Bowles, Mackintosh, & Torn, 2001).

One possible solution to integrating communication skills into educational preparation is to use simulation derived from the evidence of effective behaviors. The use of simulated patients for nursing education, such as SimMan®, has been widely integrated into modules that teach specific technical skills, particularly during clinical situations that require rapid decision making such as cardiac and respiratory failure. Cant and Cooper (2010) provide an overview of simulation exercises used in educational programs. These clinical scenarios often focus on the technical skills and not the human responses of the patient as part of the fuller biopsychosocial assessment for changes in socioemotional functioning in potentially life-threatening situations.

Incorporating high-fidelity experiences (e.g., simulation, role playing with simulated patients) during education requires incorporation of human responses as well as realistic physical changes. Many clinical situations are unpredictable and require critical thinking, time-sensitive action, and skilled task performance (Macedonia, Gherman, & Satin, 2003). Nurses require

a level of preparation for potential patient responses as well as their own emotional responses to often intense and stressful situations in oncology care. In addition, addressing nurses' responses to patients' concerns through education, reflection, and supportive mechanisms may enhance nurse retention and decrease turnover (Omdahl & O'Donnell, 1999). Ultimately, preparing nurses and other healthcare providers through interdisciplinary education also may improve team communication (Haidet, Fecile, West, & Cayla, 2009).

Responding to a variety of expressions of socioemotional concerns should be viewed as a component of all provider communication, not just that of mental health specialties. For example, patients with a cancer diagnosis expressing anxiety about long-term prognosis may require education, support, and ongoing mental health services to achieve an outcome of decreased anxiety and improved quality of life. Identifying reasons for the extent and cause of patients' anxiety requires providers to use skilled communication to further explore and assess these concerns and provide the best response. Given the growing use of simulation in healthcare provider education, responses to these patient cues could be integrated more fully into education modules that use patient simulation. Learning these skills should be part of undergraduate education as well as continuing education for practicing clinicians. Through practice and reflection, the development of skills to not just acknowledge but also explore patient concerns would increase provider confidence and improve the identification and treatment of issues. Although some patient distress may only require additional patient education to allay fears, other conditions (e.g., depression) may require additional assessment, referral for evaluation and therapy, or pharmacologic interventions.

Conclusions

Identifying and exploring cues of socioemotional concerns from patients facing potentially life-threatening diseases, such as cancer, is an important component of quality care. This analysis suggests that providers use summaries highlighting patient-reported socioemotional concerns to verbally acknowledge patient disclosure. Lack of exploration of concerns and recommended interventions to relieve distress indicate a need for provider education regarding communication skills to effectively address socioemotional concerns. Exploring patterns of patient and provider communication is necessary to identify those provider behaviors that ultimately improve patient outcomes.

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