

How Is She? Information and the Surgical Waiting Lounge

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ABSTRACT

This paper describes an exploratory ethnographic study of the information-seeking behavior of visitors in the Surgical Waiting Lounge at the UCSF Medical Center at Mount Zion in December 2013. A model of information practice is examined in relation to existing information-seeking behavior theories, frameworks, and approaches. The finding that visitors' information poverty and inhibited information-seeking behavior manifested in a process of information gleaning—notable for its hypervigilance and meaning inference—is discussed. Similarities are drawn between this behavior, crisis situations, and situational anxiety disorder. Finally, recommendations are described in the context of anxiety-reducing interventions and established post-operative information practices.

Keywords

Information-seeking behavior, hypervigilance, anxiety, hospitals, attention

INTRODUCTION

One in 64 American adults will spend time in a medical waiting room this year, often with little information about patient status. Although waiting rooms have been studied to inform design and professional caregiver anxiety has been studied to inform post-operative patient care policy, there has been limited study of the visitor experience as a factor in surgical patient outcomes. To address this void, I conducted an exploratory ethnographic study of the information-seeking behavior of visitors in the Surgical Waiting Lounge (SWL) at the UCSF Medical Center at Mount Zion in December 2013. These visitors can be considered a special class of information seeker. Compared to the medical personnel who are tending to patients, an SWL visitor typically is unfamiliar with the physical and administrative environment, is unlikely to have experience in medical risk assessment, is emotionally invested in the patient's outcome, and must reconcile a challenge to her

locus of control.

This exploratory ethnographic analysis employs a naturalistic, inductive method informed by grounded theory to develop a conceptual understanding of visitors' information-seeking behavior (Lofland, et al., 2006). It addresses the research question: What would a model of information-seeking behavior look like in this context?

Following a brief literature review and a description of the environment and individuals within and directly surrounding the space, I present a model of information practice, the primary aspects of which are examined in relation to existing information-seeking behavior theories, frameworks, and approaches. Finally, I discuss how information seeking in this context elicits aspects of behavior akin to (1) crisis situations and their concomitant hierarchical, task-related information provision, and (2) situational anxiety disorder and its characteristic misinterpretation of symptoms.

LITERATURE REVIEW

There have been very few studies on the effects of various information-provision practices on hospital visitors, and fewer on visitors of surgical patients. I have found no studies focusing specifically on information practices of SWL visitors waiting for patients in non-elective surgery. This is surprising, given the increasing need for post-operative patient support in light of technological advances and changes in health care policy that have fueled a dramatic increase in the number of surgical procedures conducted in the United States, as well as a significant decrease in the amount of time that patients spend in physical care of medical personnel (Cullen, 2009).

However, there exists a healthy literature on reducing patients' preoperative anxiety. Several studies employ cognitive behavior interventions to prevent and/or mitigate patient anxiety. Such interventions with respect to youth patients have entailed positive visual priming, provision of toys and coloring books, playroom activity, cartoon viewing, playing lullaby music, and the creation of other similar distraction conditions (Munday, 2009; Stephens-Woods, 2008). For adult patients, interventions have included the use of aromatherapy, in-person communication, interior design, music, and nurse liaison programs, as well as intraoperative reporting via telephone, pager, or digital information screen. In addition, hospital personnel also have provided information updates to visitors and the public at large via live tweets

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(Parker-Pope, 2009; Munday, 2013). Broadly, the primary objective of these interventions is the timely provision of information from the operating theater to the visitor. Three relationships are useful for understanding why timely information provision is a central goal.

Information & Anxiety

Many models of information-seeking behavior are based on the assumption that an information seeker makes “a conscious effort to acquire information in response to a need or gap” in knowledge. This information gap—“a recognition that [one’s] knowledge is inadequate to satisfy a goal”—creates anxiety, which may motivate a decision maker to search for information (Case, 2012, p. 5). As I describe in the data analysis and discussion section, the relationship between a perceived information gap and visitor anxiety in this particular context is strengthened by her low status in the information hierarchy relative to the other people involved with the patient in surgery.

Threat & Attention

Cognitive models of anxiety represent the allocation of attention relative to perceived threat. In other words, in the presence of threatening stimuli, we tend to focus on the information signalling danger, and pay less attention to other information. Eriko Matsumoto (2010) reviews several studies supporting a model of information search in which anxious people exhibit an efficient and automatic scan of the environment for threats, yet conduct contemplative, attention-focusing searches for non-threatening information. This makes evolutionary sense; it behooves us to recognize quickly and respond to threatening information. (This distinction between rapid detection of danger and contemplative allocation of attention to non-threatening information is reminiscent of Danny Kahneman’s fast and slow modes of thinking; a future paper will explore this relationship in depth.) While several studies have demonstrated that highly anxious people detect danger more efficiently than others (e.g., Reinecke, et al., 2013), recent research indicates that difficulty in disengaging attention from detected threats may contribute to sustained anxiety (Matsumoto, 2010, p. 414). Thus, anxiety influences how we prioritize the allocation of attention to different stimuli, and fixating on threatening information perpetuates anxiety. This has numerous implications; key to this discussion, though, is the impaired capacity to pay attention to non-threatening information, which results from interpreting information in a sustained state of anxiety.

Interpretive Bias & Memory

Which brings us to interpretive bias. Anxiety can influence how we interpret information. Cognitive theories of social anxiety connect the interpretation of ambiguous information as threatening with a sustained state of anxiety. “The cognitive models suggest that socially anxious (SA) individuals rely on pre-existing negative beliefs to resolve ambiguous social cues” (Beard & Amir, 2009, p. 406). Just as people suffering from social anxiety disorder interpret new information based on antecedent negative belief,

visitors in the Surgical Waiting Lounge are primed by the high-anxiety context stemming from their relative information poverty. Thus, when SWL visitors encounter new information, the meaning they ascribe to the signal is distorted. “[C]ompared to non-anxious controls, anxious individuals show threat-favouring processing biases in attention” (Reinecke, 2013, p. 321). (For a thorough review of interpretive biases related to cognitive theories of anxiety, see Mathews & MacLeod, 2005.) The implications of this anxiety-provoked interpretive bias extend to one’s ability to recall past events accurately. “[C]ognitive habits of interpreting ambiguous events in negative ways provide the basis for distortions when the events are brought to mind subsequently” (Hertzel & Brozovich, 2010, p. 155). In situations of high anxiety, then, interpretation biases contribute to distortions in memory. For example, imagine how an SWL visitor might respond to questions on a post-operative satisfaction survey a month after a family member’s surgery. (It is important to note that patient satisfaction survey results often play a role in hospital resource allocation decisions.)

These entwined biases, behaviors, and tendencies are provided to help situate the following ethnographic account and to serve as background for thinking about the information practices of visitors in the Surgical Waiting Lounge.

METHODS

I employed a naturalistic observation approach and grounded theory with the aim of developing a conceptual understanding through an inductive process. Naturalistic observation was selected to observe behavior “in the wild.” Rather than beginning with a theory about what a model of information-seeking behavior in the SWL context should look like, I focused on the question, vacillating between data collection and analysis in an iterative fashion often characterized as constant comparative analysis (Glaser & Strauss, 1967).

Waiting rooms, especially those with occupants who inhabit them infrequently, are excellent spaces for ethnographers. Although the SWL is a physical space, it is a *different* space every day. The experience was not that of an interloper or intruder, because the majority of those occupying the space were unfamiliar with it. It occurred to me at the time that the assemblage was like a flash mob without the common social or political interest.

DATA ANALYSIS AND DISCUSSION

During the eight-hour observation period, I worked with two means of recording observations: my MacBook Air laptop, and my Moleskine notebook. In a single Microsoft Office Word file, I entered observations about five categories, described in Table 1.

People	This category includes demographic estimations, group compositions, and physical actions performed by individuals who occupied the SWL during the eight-hour period from 10am to 6pm on December 12, 2013.
Space	Space in this context refers to the physical environment. I used this category to record observations about the physical elements of the SWL and the locations of the people within it. I also included notes on lighting, temperature, and other factors that affect comfort.
Intentional messaging	This category is the repository for my observations of communication efforts on the part of the hospital personnel. I supplemented these observations with my assessments of whether the communications appeared to accomplish the intended objectives.
Sounds	I added the Sounds category as I began to perceive a pattern of people exhibiting a heightened alertness to aural cues.
Privacy	I also added the Privacy category as I noticed a mismatch between expectations and reality in the communication of personal information. In the final analysis, I merged this category into the Sounds discussion.

Table 1. Initial categories of SWL information practice

Certainly there are other categories that may have been more helpful for me to organize my observations and interpretations. However, as I began open coding, the observations and impressions I recorded were easily compartmentalized. The ease with which I was able to sort my observations into groups and categories in the axial and selective stages of data collection may be due to how I organize my thoughts generally, but I think the addition of categories as patterns emerged provided the opportunity to record quickly and unobtrusively. I used the notebook for sketching the layout of the room and particular features that I wanted to be able to recall with certain detail in the future. In the following section, I indicate log entries in italics.

Immediately after the observation period, I reviewed my notes and sketches and elaborated on my shorthand. As I reread the observations and interpretations, I confirmed my sense that sounds and privacy would be key issues to consider with regard to building a model of the information-seeking behavior of the people in the SWL. Each category mentioned above is presented here, along with an account of the inductive development of an information ground that represents the experience.

Model

The SWL can be conceived of as the visitor's information ground as depicted in Figure 1. (Fisher, 2005; Savolainen, 2009). Within this context, the visitor's affective state contributes to and is influenced by the physical environment, including factors such as comfort and privacy, as well as the intermittent interruption of the relative silence of the space by activities of hospital personnel and sounds that take on a strange significance in the absence of other information and in light of the extraordinary state of concern and uncertainty for the absent patient.

People

If one were to conceptualize the context of a surgical procedure from an information-seeking perspective, the patient would be situated at the center of all activity. The patient-focused approach to medical practice by definition relegates those who seek information about and on behalf of patients to a peripheral position, and rightly so. The SWL, then, is distinct from most other areas of the hospital in that the patient is most certainly *not* present. The absence of the patient is particularly salient, given the uncertainty associated with surgery and the possibility that the patient may not survive.

Given that the central person about and around whom information is generated, sought, and disseminated is not present physically in the context of the SWL, those who are waiting there are in an informationally vulnerable position. They actually may have the most concern for the patient, yet are the least informed. For the purpose of this description, I refer to those people in the waiting room who are interested in information about surgical patients as visitors. While everyone who passes through this context is an information seeker of some sort, visitors are a specific class of information seeker, in that they typically are less familiar with the medical facilities, terminology, routines, procedures, and resources than those who work at the medical center. In addition, visitors are more likely to have an emotional connection to the patients for whom they are waiting, which may affect their information-seeking behavior. This is not to say that hospital personnel such as nurses, doctors, and volunteers do not seek information in the SWL. However, the types of information they seek, their level of familiarity with the physical and administrative environment, and their states of emotional engagement differ significantly from those of visitors. Further, despite health workers' perception that a lack of information about surgical and post-operative procedures is a primary cause of visitor anxiety, little attention has been paid to addressing this problem (Moretti & Zampieron, 2009).

The many different hospital personnel, such as nurses, doctors, specialist health professionals, specialist non-health professionals, volunteers, administrative professionals, and maintenance staff are often difficult to differentiate by appearance, but can be classified by the types of information they seek and disseminate. Throughout this paper, I have simplified these classifications by grouping personnel into the following categories: doctors, nurses, and staff.

People occupy the seating area in a way that puts distance between themselves and others until the room fills with more people than can be accommodated with empty chairs to partition visitor groups. There is not much conversation among the individuals within visitor groups. They seem to engage in solitary, distracting activity.

Most people don't talk to one another, choosing instead to read newspapers or books, or to peck at their smartphones. Some people sleep, needlepoint, file nails. Another works on his laptop.

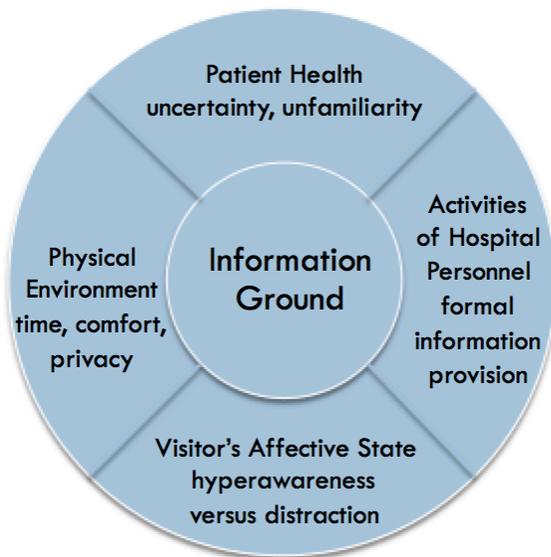


Figure 1. The visitor's information ground

Visitors seem to stay put, only rising from their chairs at the behest of medical personnel to receive news, or to quickly venture into the hallway in search of a restroom. It seemed odd that there was very little communication outside visitor groups. In one sense, we were all in the same situation of uncertainty and concern, yet there was no camaraderie among visitors who waited for different patients. This siloing seemed to heighten the sense of quiet in the room. When the silence was interrupted, any sound attracted the attention of everyone in the room (with the exception of the one man who slept for approximately three hours). One of the patterns that led me to create the Sounds category while coding visitor behavior, without fail, all conscious visitors exhibited movements that indicated they not only noticed audible information provision, but also *focused* on the activity. Thus, the visitors prioritized the allocation of attention to the new sound, in a way that might be explained by the automatic threat detection tendency observed in situations of high anxiety. For example, I observed visitors' gazes seek and home in on the source of the audible information. When the sound was of relatively low volume (as compared to the loudest), I observed that some people also moved their torsos or tilted their heads slightly toward the audio source.

At various points, a visitor receives a phone call (mobile). Some visitors jump up when the phone rings, and answer the

call as they leave the room in search of privacy in the echo-prone hallway. Others remain seated and answer the call in their native tongues, with no effort to prevent disturbing others.

Space

The physical aspects of the SWL include the many material elements of the interior of the room: chairs, carpet, signs, telephones, electrical outlets, air temperature and quality, lighting, and other items. Figure 1 provides a sense of the layout and features of the SWL.

The chairs are leatherette, at first comfortable, then lacking in support. Anxious-seeming family members trickle in and out as the surgical cases start, continue, and finish.

In addition, the SWL can be defined by elements that are not physical in nature, such as sounds and norms of etiquette. One such notable feature of the space was the single wide window in the room. The horizontal Venetian blinds circa 1984 were brown and battered. One could not see through the window, except to get a general sense of where the sun was in the sky. The way the light cast through the blinds was, for me, an indicator of the passage of time. I found this notable because there were no clocks in the room. Even though every person in the room possessed a mobile phone, I thought the lack of a communal timepiece was unusual, and wondered if it might be intentional so visitors would not fixate on the duration of the wait.

Intentional Messaging Signs

One of the first things I noticed was that the waiting room had two signs, each with a different name. The first sign was a small placard on the door at the entrance of the room. It was about the size of a sheet of paper, and printed in Helvetica font: Surgical Family Waiting Room. The second was composed of matte silver metal letters attached to the northeast wall of the room: Surgical Waiting Lounge. This struck me as humorous, as I could imagine the conversation preceding the selection of the letters. It was like calling a \$15 mani-pedi a luxury spa experience.

Two other signs caught my attention. One stipulated that no food or drink was permitted in the Surgical Waiting Lounge. The other, on the far side of the room above a metal desk that had seen better days:

A sign stating "Use this phone to speak directly to Recovery Room Staff" hangs above and empty telephone wall mount. A man points this out to his wife, and then she tells him that the phone is there, but it's sitting on the desk, not hanging on the wall.

The phone sat on the metal desk, next to a stack of metal trays that held flyers of some sort. Against the tray leaned a laminated, handwritten sign that read, "Information." A sign in the back of the room states that there is free wi-fi connectivity for UCSF guests, but it appears to work only intermittently. In a rare moment of connection, I sent an email to UCSF technology services explaining the difficulties I'd

been having and the resultant frustration for waiting family members. To date, I have not received a response.

Interpersonal information provision

When there was news to be conveyed about a patient, a doctor or nurse would enter the room to talk with a visitor. Each time, it seemed most of the visitors would look at the doctor or nurse, even after it was clear that the message was intended for another person. It seemed as if it took a moment for each visitor to reconcile that the news was irrelevant to the health his or her patient of interest. Further, there was little effort to protect patients' privacy. Detailed explanations of medical procedures and personal conditions were communicated in a loud, matter-of-fact manner, which appeared to unnerve some visitors, but no one challenged this delivery method. This is not surprising, given how information poor the visitors were.

Every 40 minutes or so a nurse in light blue scrubs sticks her head in the doorway and calls out, "Family of Engleman?" or "Family of Maldonado?" And a visitor gathers belongings and scurries out into the hall, either to be taken to the recovery room, or to receive a bit of news and return to the Surgical Waiting Lounge to wait some more.¹

When there was no news, there was no indication as to how to obtain some. On only one occasion did a visitor actively inquire about the condition of a patient.

Although some hospital staff is visible behind sliding glass windows at the far end of the room, their roles do not include interaction with the visitors. A man asks one of them whether there is any information on Caroline, in urology. The staff member at the glass explains that she is not informed about surgical patients and that the man should look for the nurse or attending on Caroline's case.

The lack of active information seeking among visitors in the Surgical Waiting Lounge may be explained by several factors. It seemed as if visitors relegated themselves to a passive "information gleaning" role commensurate with their place in the hierarchy of information provision. (See Figure 2.) This is akin to crisis situations, when information provision is managed in the most efficient manner to ensure the people who need the information to carry out critical tasks receive that information as soon as it is available, whereas others who may be interested but not instrumental in attending to the crisis receive updates when possible (Coombs, 2007).

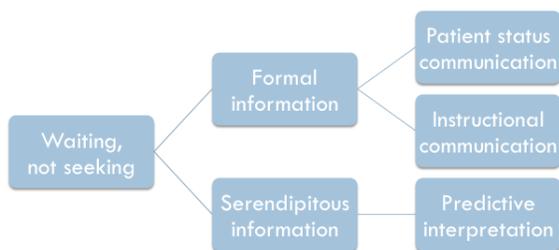


Figure 2. Model of the information-gleaning process

¹ All names have been changed to protect privacy.

Further, the high level of unfamiliarity with both the physical space and the medical situation may inhibit the information-seeking behavior visitors typically exhibit in other contexts. Several factors create a sense of uncertainty and perhaps even inferiority that contributes to the passive information gleaned observed, including: clinical/medical language, unfamiliar concepts, high emotionality, diverse demographics, diverse medical situations, and unpredictable time scales.

Sounds (includes the Privacy category)

The most striking aspect of the Surgical Waiting Lounge was how different sounds became key signals of information to the people waiting for word on their family members. The most intriguing of these sounds was that of a gurney being pushed through the doors of the operating room suite and into the hallway adjacent to the Surgical Waiting Lounge. The sound was jarring, as the end of the gurney struck the doors. Soon it was softer, but by then every visitor leaned in the direction of the noise, as if it carried within it the identity of the patient, still unconscious and strapped onto the gurney. Again, the lack of privacy in the communication of information pertaining to specific patients also attracted the attention of visitors in the Surgical Waiting Lounge, which will be addressed in the next section.

DISCUSSION

The initial objective of the study was to develop a model of the information behavior of the waiting room occupants in a situation of severe information poverty. In the process, however, two unusual observations led to an expansion of the research objective. The Surgical Waiting Lounge visitors exhibited a reticence to seek information actively, as well as a hypervigilant attention to sound, which manifested in irrational ascription of meaning to signals that were unrelated to patient status. Therefore, my objectives expanded to address this unusual behavior.

As I mentioned, an increasing proportion of post-operative care falls to the patient's support network, typically comprising family members. Therefore, it is imperative that visitors understand and are capable of carrying out post-operative instructions. Even though protocols exist to ensure the review and physical provision of discharge paperwork to the patient and her support network, studies indicate that this information often is forgotten, resulting in suboptimal patient outcomes and/or necessitating additional communication with hospital staff. This is not surprising, given the effects of anxiety on information detection and interpretation described in the literature review. It is easy to imagine that physiological effects of a sustained state of anxiety could interfere with a visitor's ability to shift from a hypervigilant mode of attention allocation to a contemplative mode necessary for receiving and parsing post-operative care instructions.

Sociologist Barry Schwartz (1974) explores the relationship between waiting time and feelings of empowerment and self-worth: "Typical relationships obtain between the individuals' position within a social system and the extent to which he waits for and is waited for by other members of the system. In general, the more powerful and important a person is, the

more others' access to him must be regulated." He explains that to be kept waiting, "especially to be kept waiting an unusually long time, is to be the subject of an assertion that one's own time (and therefore, one's social worth) is less valuable than the time and worth of the one who imposes the wait" (Schwartz, 1974). This understanding of power and time resonated with me in the Surgical Waiting Lounge, because visitors are cognizant of their status as interested parties on the periphery of critical patient care. In other words, visitors know they are low on the information totem pole, and prioritize patient wellbeing above their own need to resolve uncertainty. Schwartz's theory offers insight into the differences between my model of the visitors' information practices and several established models of information behavior.

For example, my study of information practice models would support an assumption that information poverty leads to active information search. However, in this case the expected behavior does not occur. Rather, typical information-seeking behavior was inhibited because visitors know their place in the information hierarchy. Of course, this knowledge does nothing to bridge the information gap that lies at the root of the visitors' anxiety-influenced information practice.

During the observation period, I noted how social norms arose in the Surgical Waiting Lounge. Several conditions unique to the SWL inhibited active information-seeking behavior and led to what I call *information gleaning*. Not only was the physical space unfamiliar, but the concepts and terminology were also challenging for the visitors. In addition, there was an understandable sense of high emotionality. Emotion was evident on several occasions; for example, one visitor group received news that the patient's liver was riddled with cancer. The three women in the group—sisters or aunt and nieces—burst into tears.

Intergroup discussion was absent, and intragroup communication was minimal. Therefore, the room was particularly quiet, compared to other waiting commons. This silence seemed to amplify environmental sounds, such as footsteps and alarms. The visitors appeared to fixate on such sounds, and to draw conclusions from them. In the absence of typical ambient noise in an information-poor social setting, the visitors became hypervigilant and focused attention on every audible signal, which I observed in the form of locked gazes on the source of each sound, which were sustained for the duration of the audible signal. After a several hours of observing this intense, almost physical strain to acquire information aurally, I realized that visitors were not only trying to determine whether their patients were out of surgery, but they were trying to gauge some sense of likelihood that the outcome will be good. When good news was delivered to a visitor, I noticed other visitors seemed to relax somewhat. Several visitors took audibly deep breaths after positive information provision to others, as if encouraged. The combination of a lack of concern for privacy during information provision by doctors and nurses, coupled with the relative silence created by a lack of verbal interaction between

visitor groups created a context in which visitors became hyperaware of sounds and *ascribed meaning* to those sounds, even when the sounds were irrelevant to the patient of interest for that visitor.

When active information seeking by those inhabiting the Surgical Waiting Lounge is inhibited, a hypervigilant mode of information acquisition arises that serves multiple purposes: restores a sense of control, allows for a means of active information gleaning that does not interfere with the professionals at work, and provides a focus for attention. The implications of these findings—particularly the peculiar ascription of meaning to information unrelated to the wellbeing of patients for whom visitors were waiting—are discussed in terms of meriting additional study, as well as identifying opportunities to reduce visitor anxiety.

The information behavior of visitors in the Surgical Waiting Lounge can be compared to that of two well-studied situations from which we may be able to draw insight. In a crisis situation, information provision is contingent on individuals' "need to know" so attention and effort can be focused on resolving the emergency. In such scenarios, people who are not essential to the management of the crisis generally understand that their temporary information poverty is necessary, and that they should avoid interfering with the work of emergency personnel. Similarly, as previously mentioned, the Surgical Waiting Lounge visitors realize their information poverty is a sacrifice they make so the medical personnel can attend to their loved ones without interruption or distraction. We also may gain understanding that would be beneficial for Surgical Waiting Lounge visitors by examining strategies and techniques that alleviate situational anxiety disorder. Sufferers of this disorder become hypervigilant and misinterpret symptoms and situations in specific contexts (situational anxiety, 2009). The literature on both of these types of behavior offers guidance that may be helpful in reducing anxiety for visitors in the Surgical Waiting Lounge.

It might seem unintuitive to be concerned with the anxiety of Surgical Waiting Lounge visitors when the primary objective of the medical personnel is to care for the patient. Given surgical patients' increasing post-operative dependence on personal support systems, however, ameliorating the anxiety stemming from information poverty in the Surgical Waiting Lounge holds significant—and unexplored—potential to improve patient outcomes. Potential tactics for health care providers to create a less stressful experience for visitors include traditional and new means of setting expectations for timely information provision, as well as employing de-biasing techniques used in cognitive behavior therapy. One approach in development entails the use of a tablet device with software that delivers status updates on a consistent basis, along with post-operative instructions and other electronic resources. The consistent communication is intended to alleviate the sense of information poverty that contributes to visitor anxiety. The opportunity to read and review post-operative instructions prior to patient discharge ameliorates the difficulty often experienced when trying to shift gears from hypervigilance to

learning so visitors can understand and remember medical information conveyed verbally. It also provides the visitor time to pose questions for clarification of the instructions, either through the tablet interface, or when the instructions are given verbally and in writing at discharge. In addition, the software solicits information *from* the visitor, which restores a sense of control and/or contribution to the patient's recovery, as well as a focus for attention. Finally, the software includes information on resources and services that may be useful to Surgical Waiting Lounge visitors while waiting, as well as after patient discharge.

CONCLUSION

An exploratory ethnographic study of visitors in the Surgical Waiting Lounge at UCSF Medical Center at Mt. Zion found that visitors' information poverty and inhibited information-seeking behavior manifested in a process of information gleaning, notable for its hypervigilance and meaning inference.

Social norms arising in an unfamiliar place, an inhibition of active information-seeking behavior in an effort to avoid impeding on the serious work of medical professionals, and an instinctual need to ascribe meaning to any information obtained contribute to the information ground that is the Surgical Waiting Lounge at UCSF Medical Center at Mount Zion. The feeling of disconnect from the patient and contemplation of the world without that person seems to shift the visitor into a pattern of information gleaning that is similar to what one might observe in a crisis situation, where information is channeled hierarchically to those people who must perform critical tasks (Coombs, 2007). Visitors' active information seeking is inhibited by high levels of uncertainty and emotionality in the Surgical Waiting Lounge. Insights from crisis management and techniques to mitigate situational anxiety disorder may be useful in reducing visitor anxiety, which may have significant effects on patient outcomes, including satisfaction with the hospital experience—a significant metric for resource allocation. Future studies will investigate the use of de-biasing tactics in traditional information provision for SWL visitors, as well as use of a tablet device with software to provide regular status updates, post-operative information, and other resources that restore a sense of control and mitigate information poverty.

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