The Effect of Bedside Handoffs on Patients’ Perceived Fears

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The Effect of Bedside Handoffs on Patients’ Perceived Fears

Lee Honors College Thesis Project

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Abstract

Fear, anxiety, and apprehension can have a profound effect upon patient outcomes, possibly leading to a worsened health condition or delay in recovery. Current literature finds that communication and social support by the nursing staff may foster patients’ understanding of their care and their experiences of feeling safe. The bedside handoff is one way of enhancing communication and providing support within nurse patient interactions. The purpose of this study is to explore the effect of bedside handoffs on patients’ perceived fear, anxiety, and apprehension. A secondary analysis was performed upon a larger quantitative data set from two studies that were designed to identify inpatients’ perceptions of bedside handoffs. Data analysis focused upon the following variables from the original studies: frequency of bedside handoff, the degree to which bedside handoff made patients feel safe, patients’ reports of fear, anxiety, or apprehension, and the degree to which patients reported that bedside handoff relieved fear, anxiety, or apprehension. Descriptive statistics, Pearson’s correlation coefficient, independent-samples t-tests, paired-samples t-tests, and one-way analysis of variance were conducted to summarize the data and identify significant relationships between variables. Preliminary findings illustrate that bedside handoff shows some benefit in reducing patient reported fear, anxiety, and apprehension and a great benefit in helping patients feel safe within the hospital setting, but only when it is implemented consistently. These findings demonstrate the benefits patients receive from being informed, participating in their care, and communicating with the nursing staff throughout the hospital experience. However, current practice indicates that fear may continue to hinder patients from receiving the full benefit of interventions, and nurses may use this knowledge to identify and provide further care for these patients.
The Effect of Bedside Handoffs on Patients’ Perceived Fears

**Background and Significance**

Fear, anxiety, and apprehension are basic human emotions that are experienced by many. The terms are generally defined as a state of uneasiness, uncertainty, dread, or anticipation related to a real or perceived threat of danger (Venes, 2009). Fear, anxiety, and apprehension are essential for human motivation and survival; however, if prolonged they may drive individuals to engage in defensive and avoidant behaviors, which can affect physiological functioning and healing (Dubayova et al., 2010).

The general adaptation syndrome identifies the physiological stages an organism may experience when confronted by a perceived threat. When the threat is first perceived, the organism goes into the alarm response and physiological functioning initially declines; however, over time the body utilizes resources to restore this functioning in the stage of resistance. Without proper adaptation or intervention, an organism may persist in the stage of resistance or progress to the stage of exhaustion. This may lead to depletion of natural resources, malfunctioning of vital organs, and an overall endangerment to life (Selye, 1950).

Promoting health outcomes and physiological healing is the primary goal of healthcare environments. The significant health risks associated with unrecognized fear, anxiety, and apprehension, therefore, sparked healthcare researchers to study the cause of these emotions for patients within the hospital setting. Symptom-induced pain or discomfort, presumed diagnosis, anticipated consequences of treatment, coping failures, and reinterpretations of the illness condition were found to be causes of patient reported fear (Dubayova et al., 2010). A lack of caring relationships from healthcare professionals was also found to create anxiety, unnecessary discomfort, dissatisfaction, uncertainty, and functional decline in patients (Mollon, 2014).
To begin addressing patient fear, anxiety, and apprehension, the concept of safe care was focused upon in research. Safe care involved a safe environment, safe patient practices, and a therapeutic unit culture where care is delivered (Mollon, 2014). Safe care was found to be effective in addressing actual patient safety; however, patient fear, anxiety, and apprehension required the focus of safe care to be shifted to perceived safety or feeling safe (Mollon).

Feeling safe is a concept that was originally defined as an emotional state where no imminent danger or injury is perceived (Russell, 1999). Over time, feeling safe developed into an ideal where patients perceived a sense of security and freedom from harm (Mollon, 2014). Feeling safe can be promoted in the inpatient setting in a multitude of ways. The use of patient-centered care models and the creation of positive healthcare environments through trust, caring, presence, and knowledge within the nurse-patient relationship promoted a sense of safety while hospitalized (Mollon). Social support and increased communication between nurses and patients also improved patients’ sense of feeling safe, as well as overall satisfaction with the health care process (Gill, Dunning, McKinnon, Cook, & Bourke, 2014; Lasiter, 2011). Specifically, patients reported a sense of feeling safe when nurses showed at least two of the following four attributes: initiative, oversight, predictability, and proximity (Lasiter). Additionally, patients stated that they felt the most safe and satisfied with their care when they were able to communicate their needs, demonstrate some level of control over their situation, and participate in their care (Gill et al.).

The Joint Commission has recognized the need to encourage patients to be active participants in the healthcare process, stating that patient and family involvement regarding care, treatment, and services is an important component to the culture of safety (Ofori-Atta, Binienda, & Chalupka, 2015). To promote this ideal, the bedside handoff has been proposed as a means of promoting patient inclusion and communication. Bedside handoff involves an interactive
discussion occurring at the bedside between the incoming nurse, outgoing nurse, patient, and family about the patient’s status and plan of care at every shift change. The Agency for Healthcare Research and Quality defines bedside handoff as an opportunity to create an environment where patients, families, clinicians, and hospital staff can work together to improve quality and safety of care (Ofori-Atta et al.).

Patients have reported a significant increase in their perception of being informed, being an active participant within the healthcare team, and feeling confidence that their concerns were known after bedside handoffs were instituted (Maxson, Derby, Wrobleski, & Foss, 2012). Bedside handoffs also promoted patients’ perceived comprehension and understanding of their care and satisfaction with the health care process (Ford, Heyman, & Chapman, 2014). These attributes have the potential to lead to an increased sense of autonomy, which in turn may allow patients to exercise control over the situation and participate in their care. These benefits exhibit the attributes Gill et al. (2014) found to improve feelings of safety among patients.

Bedside handoff provides the opportunity for both the nurse and the patient to clarify missing information, correct inaccuracies, and detect errors or deteriorating patient status (Jeffs et al., 2013). This promotes nursing surveillance, which plays a key role in the culture of safety, as nurses are able to more rapidly detect patient changes and initiate appropriate interventions (Dresser, 2012). Patients have been found to be a crucial component in detecting errors and correcting information during the bedside handoff (Jeffs et al.). This process not only promotes patient participation that has been documented to improve feelings of safety, but nursing surveillance also aids in establishing the nursing attributes of initiative, oversight, and proximity that Lasiter (2011) found to increase patients’ sense of safety.
To achieve the benefits that have been documented for bedside handoffs, the frequency of implementation is important to consider. Patients who experienced bedside handoffs consistently during their stay viewed that they were protected from errors, that the nurses planned their care, and that they were able to be involved in healthcare decisions (Ford et al., 2014). This differed significantly from patients who experienced inconsistent bedside handoffs (Ford et al.). Bedside handoffs, therefore, have the potential for profound positive effects upon patient satisfaction, communication, and understanding when implemented consistently and frequently. These findings continue to mount support for the attributes Gill et al. (2014) outlined to assist patients’ sense of safety within the hospital setting.

There are many identified benefits for the utilization of frequent bedside handoffs including improved nursing accountability and patient involvement, communication, sense of control, and satisfaction; however, evidence of its use in relation to patients’ perceptions of feeling safe and the effects it may have on patients’ reported fears has yet to be established. Therefore, the purpose of this study is to explore the effects of bedside handoff on patients’ perceived fear, anxiety, and apprehension.

Methods

Design

This study is a secondary analysis of a larger quantitative data set from two studies carried out in 2011 – 2013 and 2014 that were designed to identify inpatients’ perceptions of bedside handoffs (Ford et al., 2014; Ford & Heyman, in press). A descriptive correlational design was utilized to explore the relationship between bedside handoffs and patient fear, anxiety, and apprehension. Descriptive correlational designs are used to explore relationships between variables without inferring causal connections (Polit & Beck, 2014).
Participants

The parent studies surveyed patients who were hospitalized on adult medical-surgical floors that implemented bedside handoffs 18 months prior to the time of the studies. The subjects were recruited by convenience sampling once they met the following inclusion criteria: an age greater than 18, fluency in spoken and written English, an absence of a dementia or confusion diagnosis, spending their entire hospital stay on the unit of study, meeting the hospital’s criteria for informed consent, and experiencing at least three bedside handoffs during their hospitalization. Institutional review board approval was obtained for further analysis of the data.

Data Analysis

The parent studies utilized a survey that instructed the participants to indicate their level of agreement or disagreement with multiple statements regarding their hospitalization and experience with bedside handoff using a four point Likert scale (1 = strongly disagree to 4 = strongly agree). The following variables were extracted from the data set for further exploration: frequency of bedside handoff; degree to which bedside handoff made patients feel safe; patients’ reports of fear, anxiety, or apprehension; and the degree to which patients reported that bedside handoff relieved those feelings. The data was analyzed using SPSS version 21. Pearson’s correlation coefficients, independent-samples t-tests, paired-samples t-tests, and one way analysis of variance were utilized to identify significant relationships between the variables.

Results

The sample was comprised of 207 participants, with equal representation of gender. The majority of the sample was Caucasian or White, 60-69 years old, with a high school education or equivalent. Within this sample, there were 66 participants who reported experiencing fear. This smaller sample is representative of the larger sample demographics (see Table).
The relationship between frequency of bedside handoff and how patients reported that bedside handoff reduced their fear was explored using Pearson’s correlation coefficient. The relationship was determined to be positive but not significant. An additional correlation coefficient was conducted to explore the relationship between frequency of bedside handoff and how patients reported that bedside handoff helped them feel safe. A statistically significant positive correlation was found between these variables ($r=0.291, n=64, p=0.02$).

An independent-samples t-test was done to explore if participants reported that bedside handoff reduced fears differently between those who always experienced handoffs ($M=3.17$, $SD=0.730$) and those who experienced handoffs a variable amount of time (most of the time or rarely) ($M=2.71$, $SD=0.717$). A significant difference was found at the $p<0.05$ level ($t(61)=2.333$, $p=0.023$, two-tailed). An additional independent-samples t-test was conducted to explore if participants reported that bedside handoff helped them feel safe differently between the always group ($M=3.60$, $SD=1.027$) and the variable group ($M=2.86$, $SD=0.854$). A significant difference was discovered at the $p<0.01$ level ($t(62)=2.882$, $p=0.005$, two-tailed).

A one-way analysis of variance was completed to describe the impact bedside handoffs have on reducing patient reported fears between those always, most of the time, and rarely experiencing bedside handoffs during their hospital stay. There was a significant difference between these three groups at the $p<0.01$ level ($F=5.457$, $p=0.007$). The effect size for this variance was calculated using eta squared and was found to be 0.15, a large effect size. The post-hoc comparison showed that that the mean score for always experiencing bedside handoff ($M=3.17$, $SD=0.730$) was significantly different from rarely experiencing bedside handoff ($M=2.17$, $SD=0.408$). Those who experienced bedside handoff most of the time did not show a significant difference from the other groups (see Figure 1 for graphic representation).
A one-way analysis of variance was also done to explore the impact bedside handoffs have on helping patients feel safe. Another significant difference was found between the three groups at the $p<0.01$ level ($F=8.604, p=0.001$). The effect size for this variance was calculated to be 0.22, a large effect size. The post-hoc comparison again showed that the mean score for always experiencing beside handoff ($M=3.48, SD=0.594$) was significantly different from rarely experiencing bedside handoff ($M=2.33, SD=0.816$). Those who experienced bedside handoff most of the time showed no significant difference (see Figure 2 for graphic representation).

A paired-samples $t$-test was conducted to evaluate the difference in responses between bedside handoff helping patients feel safe and bedside handoff reducing patients’ fears. The response that bedside handoff helped patients feel safe ($M=3.27, SD=0.745$) was significantly higher than the response to bedside handoff reduced fears ($M=3.02, SD=0.751$), $t(62)=2.809, p=0.007$ (two tailed). The effect of the difference in means (mean difference=0.254, 95% CI: 0.073 to 0.435) was moderate (eta-squared=0.11) (see Figure 3 for graphic representation).

The primary focus of data analysis was on the study participants who reported experiencing fear while hospitalized ($n=66$). However, applicable statistical tests were performed upon the portion of the study participants who did not report experiencing fear ($n=137$). The results yielded similar findings to the initial group. An independent-samples $t$-test was then conducted to explore the difference in responses between the two groups. For the response that bedside handoff helped patients feel safe, the group that reported experiencing fear ($M=3.27, SD=0.740$) and the group that did not report experiencing fear ($M=3.46, SD=0.583$) illustrated a significant difference at the $p<0.05$ level ($t(197)=-2.002, p=0.047$). The mean difference was -0.194 with a 95% confidence interval ranging from -0.384 to -0.003. The eta-squared value (0.02) illustrates a small effect size (see Figure 4 for graphic representation).
Discussion

The results of this analysis were similar to the findings of the parent studies. The more frequently that bedside handoffs occur, the more patients experience the benefits of this nurse-driven intervention. The independent-samples t-test and one way analysis of variance showed that the bedside handoff reduces patient fear and helps patients feel safe when it is completed at every shift change. This illustrates consistency with the findings of Ford et al. (2014), while also establishing the relevance of these findings for patients who report experiencing fear.

The results of the paired-samples t-test showed that bedside handoffs illustrate more of an ability to help patients feel safe than to decrease patient fears. This finding is of particular interest, as the original development of the feeling safe concept was to promote an emotional state where no imminent danger or injury is perceived (Russell, 1999), which opposes the definition of fear. It may have previously been assumed that feeling safe equated to the absence or reduction of fear; however, the results of this study indicate that this is not necessarily true and the concepts should not be viewed as interchangeable or mutually inclusive.

Lastly, the results of the independent-samples t-test for the questionnaire response that bedside handoff helped patients feel safe yielded an interesting finding. Although all participants agreed with the statement, the group that did not report fear illustrated a higher mean level of agreement than the group that reported fear. This demonstrates that the bedside handoff may be an effective tool to improve feelings of safety despite a patient’s perception of fear. However, it also identifies that fear may hinder patients from experiencing the full benefit of an intervention.

Limitations

When analyzing the results of this study, there are limitations to consider. First, the participants were recruited by convenience sampling, which threatens the generalizability of the
findings due to limited demographic representation and small sample size (Polit & Beck, 2014). However, it was found that the sample demographics were reflective of the study site demographics, which works towards minimizing this limitation. Second, a questionnaire was utilized as the data collection tool, which holds a risk of response bias. Response bias involves participants answering in a way that they believe is socially acceptable rather than truthful to their perceptions (Polit & Beck, 2014). This is a potential threat to the validity and accuracy of the collected data. Finally, the definitions of fear, anxiety, apprehension, and feeling safe were not defined for the study participants and left to individual interpretation. Although this upholds the purpose of the original study, it may also lead to a discrepancy in the questionnaire responses from one participant to another, affecting data validity.

**Nursing Implications**

The primary focus of this study was to explore the effect of bedside handoffs on patients’ perceived fears. The results illustrate that bedside handoffs reduce patient fear but only when it is completed consistently. These findings underscore the need for organizations to implement and sustain the practice of bedside handoffs, so that patients may experience and participate with an intervention that addresses their needs and promotes their overall healthcare outcomes.

The findings also suggest that patients perceive feeling safe differently from the absence of fear and that fear continues to be overlooked within the hospital setting. Further research into how patients perceive the absence of fear and the feeling of safety differently is needed to identify interventions that will effectively address patient fear. This analysis illustrates that current interventions continue to be lacking and nurses are holding a greater responsibility in identifying and providing care for patients who experience fear during hospitalization.
Conclusion

Fear, anxiety, and apprehension are necessary human emotions to promote motivation and survival behaviors; however, the excess or prolongation of fear continues to demonstrate detrimental consequences for the health and healing of patients within the hospital environment. With further analysis, the bedside handoff holds potential as a method to address patient fear, anxiety, and apprehension; however, nurses currently must continue to focus and advocate for patients who experience fear to ensure that they are achieving beneficial health outcomes.
References


### Table

**Demographic Findings**

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Figure 1. Frequency of bedside handoff versus mean level of agreement that fear was reduced.
Figure 2. Frequency of bedside handoff versus mean level of agreement that patients felt safer.
Figure 3. Mean level of agreement that bedside handoff helped patients feel safe compared to mean level of agreement that bedside handoff reduced patient fear.
Figure 4. Mean level of agreement that bedside handoff helped patients feel safe for participants who did not report fear compared to participants who did report fear.