Rural Nurses' Perception of Disruptive Behaviors and Clinical Outcomes: A Pilot Study

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Abstract

Purpose: The purpose of this pilot study was to explore rural nurses' perceptions regarding disruptive behavior and its impacts on interdisciplinary relationships, patient safety, and patient outcomes.

Methods: Montana nurses working at either of two rural facilities, one a small hospital and the other a critical access facility, participated in the study. The study replicated a larger study conducted by Rosenstein and O'Daniel (2005) in the VHA West Coast hospital network. A questionnaire was sent to nurses electronically via their agency's email system to assess perceptions of disruptive behavior and its effects on patient outcomes.

Findings: Fifty-seven nurses participated in the study, yielding a 47.5% response rate. Disruptive behavior was reported to be displayed more often by nurses than physicians in this study. Nurses perceived that disruptive behavior is linked to adverse events, and may also have a negative impact on patient safety and satisfaction. In addition, participants perceived a link between disruptive behavior and the psychological and behavioral variables impacting individual nurses. Finally, the majority of respondents indicated that their facility lacked appropriate reporting and counseling policies for addressing disruptive behavior.

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Conclusions: Like their VHA West Coast counterparts, nurses working in rural settings experience disruptive behavior and believe there is a link between disruptive behavior and negative patient outcomes. However, results from this pilot study suggest that disruptive behavior by nurses in rural settings is more prevalent than that of physicians, findings that contradict previous work.

Keywords: Disruptive behavior, Workplace incivility, Patient outcomes, Patient safety, Rural nursing

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Disruptive behavior has been defined as any behavior that undermines communication, team performance, patient care, and patient safety, and includes "…overt actions such as verbal outbursts and physical threats, as well as passive activities such as refusing to perform assigned tasks or quietly exhibiting uncooperative attitudes during routine activities" (Joint Commission [JC], 2008, p. 1). Historically bad behavior in health care has been excused and normalized, even being accepted as a status of the profession (Evans, 2007).

Mounting evidence suggests that disruptive behavior is a threat to patient safety, as it may result in errors, injury, or death (Evans, 2007; JC, 2008; Rosenstein & O'Daniel 2005, 2008; Saxton, Hines, & Enriquez, 2009). Indeed, communication breakdown is consistently listed as one of the top three most frequently identified root causes of sentinel events (JC, 2013). In a landmark study, more than 8 in 10 nurses and physicians witnessed disruptive behavior within the healthcare setting and over 60% felt that potentially adverse events occurred directly from disruptive behavior (Rosenstein & O'Daniel, 2005).

The consequences of disruptive behavior and general workplace incivilities are also significant to health care team members, whose health has been shown to suffer (Vessey, Demarco, & DiFazio, 2010). Frustration, fear, stress, anxiety, depression, and loss of concentration have been reported in response to disruptive behavior (McKenna, Smith, Poole, & Coverdale, 2003; Rosenstein & O'Daniel, 2005; Vessey et al., 2010). Additionally, workplace incivility has been associated with decreased nurse productivity (Hutton & Gates, 2008), reduced job satisfaction (Saxton, Hines, & Enriquez, 2009), and intent to leave an organization (Sofield & Salmon, 2003).

Recent studies assessing incidence, perceptions, and ramifications of disruptive behavior appear to have taken place in mostly metropolitan areas. However, rural nursing culture is distinctively different than urban nursing culture. According to Scharff (2010), rural nurses often are personally acquainted with everyone who works at the hospital, including all of the physicians and most of the patients. These highly connected interpersonal relationships have been shown to produce greater depth of interpersonal exchange and greater accountability for interpersonal exchange (Scharff, 2010). Presumably, then, disruptive behavior should be less of an issue in rural health care settings, but this has not been validated in the literature. There is sparse research examining the rural perspective on disruptive behavior and how nurses in smaller, more rural health care facilities experience disruptive behavior or its effects on patient care. Therefore, the purpose of this pilot study was to explore perceptions of nurses working in smaller, more rural hospitals regarding disruptive behavior and its impacts on interdisciplinary relationships, patient safety, and patient outcomes. The research questions addressed were:

1. What is the occurrence of disruptive behaviors among nurses in rural hospitals in Montana?

2. Is there a perceived link between disruptive behavior and adverse events, patient safety, and medical errors?

3. Do nurses perceive a negative link between disruptive behavior and psychological or behavioral variables such as stress, frustration, communication, and team collaboration?

Methods

A cross-sectional, descriptive design was employed. Following approval by the Investigational Review Board at Montana State University (#KA120611-EX), chief nursing administrators were contacted in each of five rural hospitals in Montana, a primarily rural state, and permission was sought to use the individual hospital Intranet to contact nurses and distribute the survey. For the purpose of this pilot study, rural was defined as a territory with a population less than 50,000 (U.S. Census Bureau, 2010), and rural facilities were defined as those within a rural territory comprised of less than 125 beds.

Of the five administrators contacted, two replied to the request. One of the two participating agencies was designated as a critical access facility (CAF) reporting 11-20 beds. The other agency was a small hospital reporting 51-100 beds.

Sample

Ultimately, 120 nurses in two central Montana hospitals received an invitation to participate in the study. Fifty-seven surveys were returned resulting in a 47.5% response rate.

Most (94.5%) nurses completing this survey were women (Table 1). Sixteen (29%) of the respondents worked in an 11-20 bed CAF, 70.9% worked in a hospital with 51-100 beds, and 1% of nurses did not identify their work setting.

Table 1
Sample Demographics (n=57)

Characteristic	n (%) *
Female	52 (94.5)
Employing Agency	
Small hospital (51-100 beds)	39 (70.9)
Critical access facility (11-20 beds)	6 (29)
Age	
20-29 years	15 (26.8)
30-39 years	19 (33.9)
40-49 years	8 (14.3)
50-59 years	10 (17.9)
60 years or older	4 (7.1)
Experience in Nursing	
Less than 1 year	1 (1.9)
1-5 years	16 (29.6)
6-10 years	13 (24.1)
11-15 years	10 (18.5)
16-20 years	9 (16.7)
Greater than 20 years	5 (9.3)

* Some data points not provided by all participants

Instrument and Data Collection

Dr. Alan Rosenstein's questionnaire, used in his seminal work exploring disruptive behavior in the VHA West Coast hospital network (Rosenstein & O'Daniel, 2005), was used with permission for this study (Rosenstein, March 7, 2011, personal communication). The questionnaire has been used in three previous large-scale studies (Rosenstein, 2011; Rosenstein & O'Daniel, 2005, 2008).

The questionnaire consists of 21 questions including multiple choice, yes-no answers, 5 and 10 point scales, and open ended questions (Rosenstein & O'Daniel, 2008). Examples of these questions include:

1. Have you ever witnessed disruptive behavior from a physician at your hospital?
2. Have you ever witnessed disruptive behavior from a nurse at your hospital?
3. What percentage of physicians would you say exhibit disruptive behavior at your hospital?

4. What percentage of nurses would you say exhibit disruptive behavior at your hospital?

5. How often does physician disruptive behavior occur at your hospital?

6. How often does nurse disruptive behavior occur at your hospital?

7. How often do you think there is a link between disruptive behavior and adverse events, patient safety, and medical errors?

8. Are you aware of any specific adverse events that did occur as a result of disruptive behavior?

Face validity of the instrument had been previously established by the developers and the questionnaire had been field tested at two urban hospitals (Rosenstein & O'Daniel, 2008) and adapted as indicated. The items on the questionnaire are applicable to all nurses of any background and did not require alteration for use with the Montana nurse sample. The questionnaire was put into electronic format using Survey Monkey for this study.

Nurses of any educational preparation who were employed in either of the two agencies were eligible and received an invitation to participate in the study, which included a letter of explanation about the study and a link to the electronic questionnaire. One reminder email was sent at day 15, and the questionnaire was available online for 30 days. Completion of the survey implied consent, and data were automatically de-identified by Survey Monkey upon submission in order to protect anonymity of respondents.

Results

The Occurrence of Disruptive Behavior

Almost all nurses (98.2%) had witnessed disruptive behavior by physicians, and most (87.8%) had witnessed disruptive behavior by nurses. The percentage of physicians estimated to

exhibit disruptive behavior was identified as between 2-5% by the majority (64.9%) of respondents. A higher percentage of nurses were perceived to display disruptive behavior than physicians, with almost half of respondents (42.8%) suggesting that 6-10% or more of nurses at their facility exhibited disruptive behavior (Figure 1).

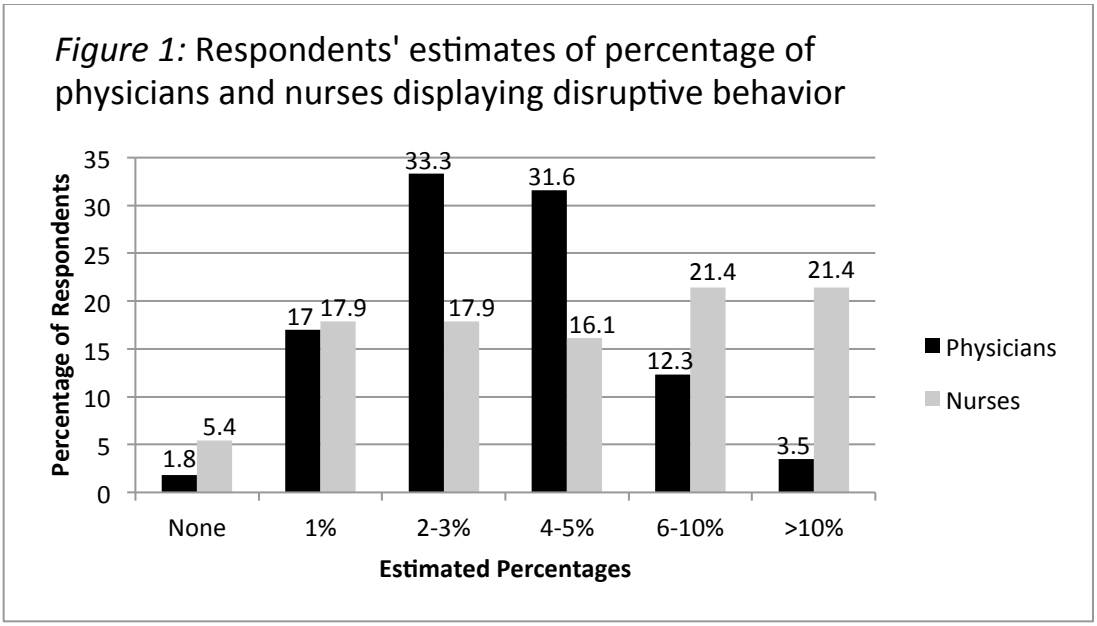
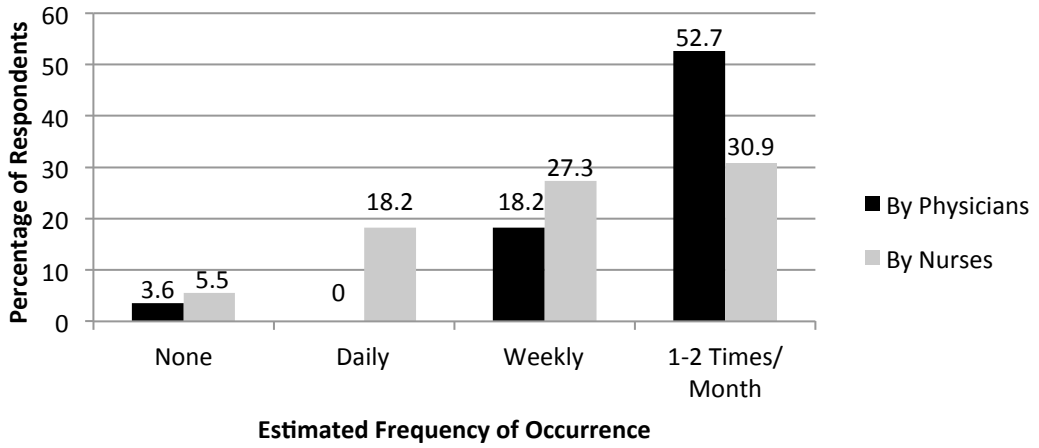


Figure 1: Respondents' estimates of percentage of physicians and nurses displaying disruptive behavior

Nurses were perceived to display disruptive behavior with greater frequency than physicians. Although no one described the frequency of disruptive behavior by physicians as daily, 18.2% of the 55 respondents to this item reported disruptive behavior occurring weekly; 52.8% reported occurrence once to twice monthly (Figure 2). Alternatively, disruptive behavior by nurses was reported as occurring daily (18.2% of 55 respondents), weekly (28.3%), and once or twice monthly (30.9%).

Figure 2. Respondents' estimates of the frequency of disruptive behavior exhibited by physicians and nurses

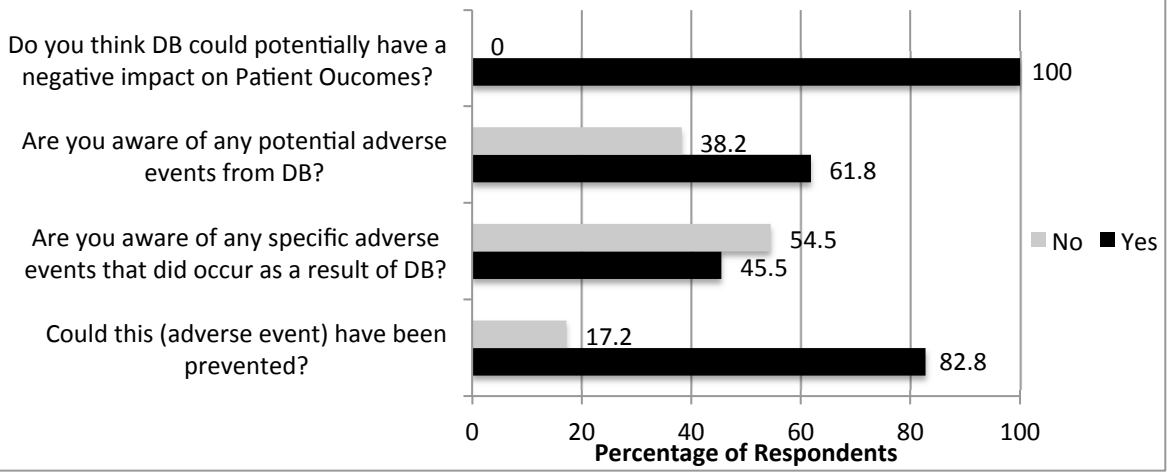


Of the 44 respondents who identified particular settings (multiple responses possible) where disruptive behavior was most prevalent, 73.3% identified the Emergency Department, 37.8% indicated the ICU, and over 35% indicated the medical and surgical units. Additionally, the majority of nurses (79.1%) perceived Cardiology to be the specialty where disruptive events occurred most often, while 25.5% of nurses felt that Anesthesia was a specialty with frequently occurring disruptive events.

Perceived Link between Disruptive Behavior and Adverse Events

Almost two-thirds (61.8%) of respondents were aware of potential adverse events that *could have occurred* as a result of disruptive behavior, while almost half (45.5%) were aware of a specific adverse event that *did occur* as a result of disruptive behavior. Of these (n=29), 82.8% thought that the adverse event could have been prevented (Figure 3).

Figure 3. Respondents' answers to selected questions



Almost half (47.3%) noted that there was no code of conduct or policy for handling of disruptive behavior/abusive behavior at their facility, and, of those who said they did have one, 72.1% said it was ineffective. The most frequently identified barriers or resistance to the reporting of disruptive behavior were the feeling that nothing ever changes, fear of retaliation, and lack of confidentiality. Of those nurses who knew of a physician who had been counseled about his or her behavior, the large majority (81.8%) indicated minimal satisfaction with the results of counseling. Of those who knew of a nurse who had been counseled about his or her behavior, 58.2% indicated that they did not believe the counseling process was successful.

Psychological and Behavioral Consequences of Disruptive Behavior

All respondents believed that disruptive behavior could potentially have a negative effect on patient outcomes. Additionally, nurses were asked how often disruptive behavior resulted in stress, frustration, loss of concentration, reduced team collaboration, reduced information transfer, reduced communication, and impaired physician-nurse relationships. The large majority of nurses reported that each was frequently or constantly a result of disruptive behavior (see Table 2).

Table 2

Percentage of Respondents Answering, "How often does disruptive behavior result in the following (psychological or behavioral effects)?"

	Never	Rarely	Sometimes	Frequently	Constantly
Stress	0%	0%	9.3%	40.7%	50.0%
Frustration	0%	0%	10.9%	40.0%	49.1%
Loss of concentration	0%	3.7%	16.7%	27.8%	51.9%
Reduced team collaboration	0%	1.9%	18.5%	27.8%	51.9%
Reduced information transfer	0%	1.9%	16.7%	38.9%	44.4%
Reduced communication	0%	1.8%	14.5%	32.7%	50.9%
Impaired RN/MD relations	0%	1.9%	20.4%	27.8%	51.9%

To assess the nurses' perceptions of the link between clinical outcomes and disruptive behavior, participants were asked how often they thought there was a link between disruptive behavior and the following clinical outcomes: adverse events, errors, patient safety, quality of care, patient mortality, and patient satisfaction. In all cases, the majority of nurses indicated that specific clinical outcomes were sometimes, frequently, or constantly linked to disruptive behavior (Table 3).

Table 3

Percentage of Respondents Answering, "How often do you think there is a link between disruptive behavior and the following clinical outcomes?".

	Never	Rarely	Sometimes	Frequently	Constantly
Adverse Events	0%	11.1%	51.9	14.8	22.2
Errors	0%	9.3	40.7	18.5	31.5
Patient Safety	0%	13.0%	33.3%	14.8%	38.9%
Quality of Care	0%	9.1%	29.1%	25.5%	36.4%
Patient Mortality	7.4%	27.8%	48.1%	3.7%	14.8%
Nurse Satisfaction	0%	0%	14.5%	38.2%	47.3%
Physician Satisfaction	0%	1.9%	32.2%	37.7%	28.3%
Patient Satisfaction	0%	5.5%	27.3%	21.8%	45.5%

Discussion

The findings from this pilot study suggest that disruptive behavior may be common in rural healthcare settings, and rural nurses' experiences with disruptive behaviors are both similar and

dissimilar to that of VHA nurses studied by Rosenstein and O'Daniel (2005). Participants in this study perceived that disruptive behavior may be linked to adverse events and may also have a negative impact on patient safety and satisfaction. In addition, these participants perceived a link between disruptive behavior and the psychological and behavioral variables impacting individual nurses. Finally, the majority of respondents indicated that their facility lacked appropriate reporting and counseling policies for addressing disruptive behavior.

Some respondents offered comments that illustrate the consequences of disruptive behavior on both patient outcomes and the psychological well-being of nurses. For example, in describing negative ramifications of disruptive behavior, one respondent noted:

> On our unit, we have had three nurses quit due to negative staff milieu. There are a couple of nurses who are rude, passive aggressive, demeaning, and manipulative. Their behavior is never addressed and nothing has changed even with reporting such behavior. Therefore, incredible nurses left because of ill feelings, increased stress, hurt feelings, and inability to function in such a negative environment.

Other comments also demonstrate the perceived impact on patient well-being:

> There are some physicians that nurses' cringe when they have to call; no matter the reason for the call. This is detrimental to patient safety and makes it even more difficult to communicate effectively.
>
> I believe that this is a very important issue that needs to be addressed in the healthcare setting. I see it too often, especially nurse-nurse. I believe patients suffer when nurses are abusive to each other, because the nurse may then be distracted, have a negative attitude, or be afraid to ask for help.

Several specific findings of this pilot study contradicted previous work by Rosenstein and O'Daniel (2005). In particular, the percentage of nurses who witnessed disruptive behavior by both physicians and nurses was higher by at least 10% in the current study. Additionally, although physician disruptive behavior was more prevalent in the VHA study, in this study disruptive behavior by nurses was perceived to be more prevalent and more frequent than disruptive behavior by physicians. Greater percentages of nurses in this study perceived links between disruptive behavior and adverse events, patient safety, quality of care, patient mortality, and patient satisfaction. For example, about 54% of the VHA sample identified a link between disruptive behavior and patient safety, while 87% of the Montana sample identified a link, a 33% increase. It is difficult to know what these differences in perceptions reflect. However, one possible explanation is that disruptive behavior inordinately magnifies the many challenges already encountered in many rural agencies.

It seems counterintuitive that disruptive behavior may be more prevalent in rural settings, given the degree of interpersonal connectedness among rural dwellers. According to Scharff (2010), the highly connected interpersonal relationships among rural health care workers have been shown to produce greater depth of interpersonal exchange and greater accountability for interpersonal exchange. Presumably, people who know each other well and see each other frequently in the community would be inclined to interact in a more courteous manner, but this pilot study did not bear that out. However, perhaps the high level of familiarity itself degrades any perceived need for professional courtesy in the workplace. Additionally, the very nature of the relationships in rural settings may add to the unique impact of disruptive behavior. As one nurse shared:

Working in such a small setting, disruptive behavior does not occur too

> frequently, however; when it does occur, it is severe. When a physician or midlevel gets angry at me for forgetting to enter an order, or not report a lab value to them, it is very embarrassing. Usually it is in front of patients or other nurses. I always feel ashamed whether I was in the right or not.

Of additional concern is the finding that disruptive behavior was perceived to be more prevalent amongst nurses in this study. Nursing is considered a nurturing profession, however; "it is paradoxical that within a discipline that has caring for others as its main focus, employee relationships are so poor" (Farrell, 1997, p. 507).

There are some potential procedural lessons to be learned from the implementation of this pilot study. Because of budget constraints, the survey was administered in an online format and delivered via each agency's Intranet. The participation was largely dependent on nurses checking their hospital email. Many nurses do not check their hospital emails on a regular basis or at all, causing a potential for decrease in response rate. Some nurses in this study indicated that they often receive multiple emails a day, so they frequently delete them without reading the content. Lastly, nurses stated that they rarely had time to check email or respond to a survey at work. One nurse stated that if the survey had been mailed or emailed to her home, she would have taken the time to participate in the survey (Personal communication, 2012). According to Shih and Fan (2008), postal mail surveys continue to have a better response rate with professionals than email surveys. Although email surveys tend to be quicker and less expensive, their overall response rates are decreased in comparison to the postal route (Shih & Fan, 2008).

In some of the rural facilities originally explored for possible inclusion in the study, nurses did not have access to computers and therefore would not be able to complete the survey. Access to computers by nurses working in rural hospitals has been documented in other studies (e.g.,

O'Lynn, Luparell, Winters, Shreffler-Grant, Lee, & Hendrickx, 2009). Although it appears that most urban hospitals within the U.S. have some access to computers, many rural hospitals may still largely depend on paper charting and have limited or no access to computers for personal use at work. Use of traditional paper-and-pencil questionnaires may be a more fruitful method for data collection in rural nurses.

Finally, disruptive behavior can be sensitive and intimidating for some participants. For those nurses who have experienced disruptive behavior, reflecting back on such incidences may have caused emotional trauma or fear of retaliation. These feelings alone may cause the nurse to decline participating in the survey. Also, some nurses may fear participating in the survey because it was sent out to their hospital email. They may have feared that their survey was seen or tracked by the hospital, which may result in their punishment for sharing hospital related events. These fears may be particularly exaggerated in rural agencies where employees are fewer and there is a lack of anonymity in general.

Limitations

Caution should be used when interpreting these findings. The sample size is small and represents the perceptions of nurses from only two facilities in Montana. Additionally, although the response rate was 47.5%, we cannot know the extent of non-response bias and whether the perceptions of those who did not complete the survey are similar or dissimilar to those who did.

Conclusion

This particular study is consistent with previous studies performed in presumably more urban settings, which examined the occurrence and consequences of disruptive behavior in the healthcare setting. Both studies illustrate that the occurrence of disruptive behavior is high in both physicians and nurses in the hospital setting. However, in this particular study, rural nurses

perceived a higher occurrence of disruptive behavior in nurses than physicians. As in previous research, rural nurses indicated that disruptive behavior is linked to adverse events, decreased patient safety, and impaired staff relationships.

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