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The Quality and Economic Impact of Disruptive Behaviors on Clinical Outcomes of Patient Care

Alan H. Rosenstein, MD, MBA[1]

Abstract

Disruptive behaviors have been shown to have a negative impact on work relationships, team collaboration, communication efficiency, and process flow, all of which can adversely affect patient safety and quality of care. Despite the growing recognition of the damage that can be done, there are still pockets of resistance to taking action to address the issue head-on. Given the new call to action from the Joint Commission accreditation standard and the growing public accountability for patient safety, organizations need to recognize the full impact of disruptive behaviors and implement appropriate policies, procedures, and educational programs to raise levels of awareness regarding the seriousness of the issue, hold individuals accountable for their behavior, and provide training and support not only to reduce the incidence and consequences of disruptive events but also to improve efficiency of communication and team collaboration in an effort to improve outcomes of care.

Keywords

disruptive behavior, patient safety, adverse events, communication, collaboration

We are all in the business of trying to do our best to improve patient outcomes of care. Adoption of evidence-based best practice standards of care, redesigning care processes, and the introduction of new technologies certainly have contributed to improvements in care delivery, yet opportunities still remain. Many of these opportunities fall into the area of human behaviors. Even the best-designed systems will falter if the frontline staff who manage patient care do not follow expected guidelines and professional standards.[1] When these behaviors compromise patient safety or quality, they are described as disruptive behaviors. Organizations need to recognize the full downstream impact of these behaviors and take appropriate action to address the issue head-on.

Background

Disruptive behaviors have been defined as any inappropriate behavior, confrontation, or conflict—ranging from verbal abuse to physical or sexual harassment—that harms or intimidates others to the extent that quality of care or patient safety could be compromised.[2,3]

Disruptive behaviors in the health care environment have been around for a long time. In the past, they were ignored, tolerated, reinforced, or just not reported. It was accepted as a way of doing business perpetuated by a physician-dominated medical hierarchy and a hidden code of silence. When individuals did speak up, they often suffered from threats of retaliation or growing anger and frustration from the lack of organizational response.[4] Many physicians were unaware that they were acting in a disruptive manner or would justify their actions based on the need to improve patient care.[5] After all, the physician did not mean it, there was no harm done, and if pressured to respond, a simple apology would soothe any hurt feelings. In some cases, we believe that things have changed.

Call to Action

In 2002, we first reported on the results of a national hospital survey that showed a disturbingly high rate of occurrence of physician disruptive behaviors and its negative impact on nurse satisfaction and retention. One third of the survey respondents reported that they were aware of a

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nurse who claimed to have left the hospital because of disruptive physician behavior.[2] In the face of a growing shortage of nurses, these findings helped draw attention to the linkage between disruptive behaviors and nurse recruitment and retention; staff shortages heightened the need for a call for action.

In 2005, we extended the scope of the survey to evaluate the frequency of occurrence of nurse disruptive behaviors and to assess the impact of disruptive behaviors on psychological factors that affect staff reactions and can adversely affect patient outcomes of care.[6] Given growing concerns about the impact of disruptive behaviors on patient safety and quality care, we continued our research in this area. In 2008, we reported the results of a more extensive survey of more than 4500 respondents from more than 100 hospitals in the *Joint Commission Journal of Quality and Patient Safety*. The report highlighted respondent perceptions of the high levels of individual stress, frustration, and loss of focus and concentration that result from a disruptive event and its negative impact on communication flow, team collaboration, and the information transfer necessary for effective patient care. Respondents felt that there was a strong correlation between disruptive behaviors and the occurrence of adverse events (67%), the occurrence of medical errors (71%), compromises in patient safety (51%), and compromises in quality (71%); 27% felt that disruptive behavior is a contributing factor to patient mortality, and 18% reported that they were aware of a specific adverse event that occurred directly as a result of disruptive behaviors.[7] These results supported the work of The Joint Commission in its root cause analysis of sentinel events; it was found that nearly 70% of the events could be traced back to a communication problem.[8] The timing of this publication was coordinated with the release of Joint Commission Sentinel Event Alert #40, which highlighted the strong association between disruptive behaviors and compromises in patient safety.[9] It also set the stage for the Joint Commission announcement of the new accreditation leadership standard, Leadership LD.03.01.01, which requires hospitals to have a code of conduct policy in place to address disruptive behaviors and a process in place to manage disruptive individuals.[10] The growing concerns about the impact of disruptive behaviors on patient safety and quality care, supported by the need to comply with the Joint Commission accreditation standard, added support to the call for action. Subsequent studies have shown similar results.[11]

Another call for action came from public sector reporting. Disruptive behaviors can directly affect patient satisfaction, hospital reputation, and in some cases, impact quality ratings. When patients witness disruptive events or encounter unpleasant unprofessional behaviors, they are more likely to express negative responses on patient satisfaction surveys or the Medicare Hospital Consumer Assessments of Healthcare Providers and Systems (HCAHPS) survey, to tell their friends, or to write about it in a number of different social blogs, all of which may affect public impression and market share.

Table 1. Call to Action

Organizational reluctance
• Cultural inertia
• History of tolerance
• Code of silence
• Fear of antagonistic physician reaction
• Organizational hierarchy
• Conflicts of interest
• Lack of organizational commitment
• Ineffective structure or policies
• Inadequate intervention skills
Risk of nonaction
• Negative staff satisfaction and morale
• Staff turnover
• Compromises in patient safety
• Joint Commission noncompliance
• Negative hospital reputation
• Decreased patient satisfaction
• Increased liability and malpractice exposure
• Financial loss secondary to reimbursement penalties for adverse events and financial costs

There is also a strong correlation between patient dissatisfaction and the likelihood of being sued. Several recent studies have shown a strong correlation between poor provider communication, patient dissatisfaction, physician incident reports, and the inclination to sue.[12-14] A recent report from the RAND Corporation showed a strong correlation between the occurrence of adverse events and the number of malpractice suits.[15] Most insurance companies no longer pay for additional expenses resulting from a selected group of adverse events, leaving the hospital at financial risk for the treatment of these conditions.[16] In addition to the no pay initiatives, California has imposed additional fines for hospitals when adverse events have occurred.[17] Hospital reputation, market share, liability, and the financial risks imposed by these new restricted reimbursement policies provide a strong financial incentive for action.

Impact Assessment

Addressing disruptive behaviors is morally and ethically the right thing to do. So what's the problem?

Table 1 provides an overview of many of the factors that contribute toward organizational reluctance to act, followed by a list of the potential risks associated with this decision. As indicated in the table, typical barriers to action may include physician intimidation, a reluctance to

Table 2. Financial Risks of Disruptive Behaviors

I.	Recruitment and retention
	• RN: $60 000 to $100 000/ additional opportunity costs
II.	Adverse events ("No pay" for adverse events initiatives)
	• Medication error: $2000 to $5800 per case; additional increased length of stay (LOS) 2.2-4.6 days
	• Hospital-acquired infection: $20 000 to $38 500
	• Deep vein thrombosis: $36 000; additional increased LOS 4.2 days
	• Pressure ulcer: $22 000; additional increased LOS 4.1 days
	• Ventilator-associated pneumonia: $49 000; additional increased LOS 5.3 days
III.	Malpractice: $521 560/ additional opportunity costs
IV.	Fines: $25 000 to $100 000
V.	Patient satisfaction, hospital reputation, market share implications
VI.	Compliance issues
	• Impact on documentation and coding
	• Impact on use efficiency (LOS, resource efficiency, discharge planning)
	• Impact on staff responsibilities (medical records completion, on call, meeting attendance)
	• Impact on quality (availability, responsiveness)
VII.	Administrative issues
	• Impact on productivity and efficiency (nonproductive activities, waste, delays, absenteeism)
	• Impact on staff morale and satisfaction

intervene because of personal relationships or potential conflicts of interest, ineffective resource support, and the lack of skill sets needed to effectively deal with the issue.[18,19] In an effort to stimulate active rather than passive attention to the matter, Table 2 outlines some of the consequences to consider when deciding how aggressively to approach the issue.

Regarding nurse satisfaction, retention, and recruitment, in addition to the impact disruptive behavior may have on morale, scheduling, and operational efficiency, the direct costs of recruiting a new nurse can range from $60 000 to $100 000. There are additional indirect costs to consider (related to orientation, training, adaptation, and experience) before the nurse can get up to speed. Nurses and other support staff are a precious resource, and efforts to enhance their satisfaction and retention are worth their weight in gold.

Regarding quality and patient safety, over and above patient and staff emotional distress and the impact on hospital reputation are the financial risks imposed by fixed dollar per case reimbursements, no additional pay for the treatment of adverse event initiatives, and other financial penalties that surround the issue of adverse patient outcomes. A report recently released from Milliman stated that in 2008, there were a total of 1.5 million estimated medical errors in the United States with an average per case cost of $13 000 and a total economic cost of $19.5 billion.[20] Although it is often difficult to attribute a cause and effect to adverse events, many can be related to poor communication and lack of compliance with accepted protocols and best practice standards of care.

One of the first areas in which specific case costs can be attributed to compromises in patient safety involves the occurrence of adverse drug events. An estimated 1.5 million preventable drug events occur in US hospitals each year.[21] The cost of an adverse drug event ranges from $2000 to $5800 per hospitalization, and the related increased length of hospital stay ranges between 2.2 and 4.6 days.[22-24] The Institute for Safe Medication Practices reports that 7% of drug errors result from provider intimidation: the nurse or pharmacist was so antagonized by the physician that they could not get the order clarification needed.[25]

Hospital-acquired infections represent another major category of potentially preventable adverse events. An estimated 1.7 million infections and 99 000 deaths related to hospital infections occur each year.[26] The costs of a hospital-acquired infection average between $20 000 and $38 500 in additional costs of care.[27]

Deep-vein thrombosis, hospital-acquired pressure ulcers, and ventilator-associated pneumonias represent 3 other major potentially preventable adverse events.[28,29] In a previous issue of the *American Journal of Medical Quality*, we published the results of a multihospital study that examined the frequency of occurrence of these adverse events and their impact on hospital lengths of stay, cost, and patient mortality.[30] The impact model looked at the discharge diagnoses in which the adverse events occurred most frequently and then compared the outcomes with those same diagnoses where the adverse event was not present. Analysis was limited to only those diagnoses for which there were at least 10 cases over the period of a year. The average occurrence rate for deep-vein thrombosis was 1.2%; the average increase in length of stay, comparing like diagnoses with and without the adverse event, was 4.2 days; and the average increase in cost, comparing like diagnoses with and without the adverse event, was $36 000. The average occurrence rate for hospital-acquired pressure ulcers was 2.0%; the average increase in length of stay, comparing like diagnoses with and without the adverse event, was 4.1 days; and the average increase in cost, comparing like diagnoses with and without the adverse event, was $22 000. The average occurrence rate for ventilator-associated pneumonia was 0.7%; the average increase in length of stay, comparing like diagnoses with and without the adverse event, was 5.3 days; and the average increase in cost, comparing like diagnoses with and without the adverse event, was $49 000. Many insurers are now refusing additional payments to cover the expense of

preventable adverse events, and this puts the hospital at significant financial risk. Even if insurers did pay, the high costs of these events are never covered by additional reimbursement.

Another area of concern is liability. Significant direct and indirect costs are associated with malpractice proceedings: investigation and preparation costs, legal fees, litigation, and payment as well as the opportunity costs related to staff time and energy being diverted from primary responsibilities. Many of these events are precipitated by circumstances involving poor communication, dissatisfaction, and the occurrence of adverse events. Several recent studies have shown a strong correlation between poor provider communication, patient dissatisfaction, physician incident reports, the occurrence of adverse events, and the likelihood of being sued.[12-15] An article in the *New England Journal of Medicine* reported that the average cost of a medical error-based claim was $521 560.[31] A recent report on malpractice risks in surgery stated that 10% of all paid surgical malpractice claims could be traced back to inadequate surgical team communication, which contributed to patient error. The average surgical malpractice claim was $345 000.[32]

In addition to the malpractice concern and the growing "no pay" for the occurrence of preventable adverse events mentioned earlier is the growing tendency to impose fines for organizational mistakes. In its latest report, the state of California fined 7 hospitals for harm caused to patients by avoidable mistakes in the delivery of care. The fines ranged from $25 000 to $100 000 per hospital. Since 2007, the state has issued a total of 134 fines to 90 hospitals totaling $4.225 million, of which $2.3 million has already been collected.[17]

Patient satisfaction is influenced by experiences with hospital staff and physicians, and reports of dissatisfaction can negatively affect a hospital's reputation. For the past several years, Medicare has been posting the results of the HCAHPS survey, which was created several years ago to publicly report the patient's perspective of hospital care. The HCAHPS results are posted on the Hospital Compare Web site in an effort to allow consumers to make fair and objective comparisons between hospitals before selecting their health care facility.[33] In the near future, these scores will be added to pay-for-performance initiatives. Public media and word of mouth also affect the organization's reputation and have the same potential to affect market share. In the 2009 Health Leaders Media Patient Experience Leadership Survey, nearly 90% of the top-level health care executives said that patient experience was either their top priority (35%) or among their top 5 priorities in moving forward and stressed the need to address both organizational issues and staff relationships that affect patient satisfaction.[34]

Noncompliance with staff responsibilities and best practice standards of care can result in inefficiency, impaired productivity, and wasted time and dollars trying to make things right. All these factors can take a toll on organizational morale and performance. Many physicians who exhibit disruptive or unprofessional behaviors also have difficulty being compliant with expected standards of behavior, staff responsibilities, and adherence to best practice standards of care.[35] In regard to process and use of efficiency, many of these physicians have problems complying with medical record documentation requirements and demonstrate unresponsiveness to coding queries and timely chart completion, both of which have a significant impact on hospital revenues and quality rankings.[30] These physicians are also less likely to comply with case management concerns about plan of care, clinical necessity, care coordination, resource use, and discharge planning. On the quality side, disruptive physicians are often resistant to outside interventions or to following externally driven guidelines or protocols for care delivery. Lack of compliance and physician resistance are more subtle forms of disruptive behavior that can lead to dissatisfaction, frustration, time delays, rework, and unnecessary waste and duplication. A recent report from the University of Maryland estimates that US hospitals waste $12 billion annually because of poor communication among health care providers; for a typical 500-bed hospital, the cost would be in excess of $4 million.[36]

Recommendations

As already mentioned, it is difficult to provide an exact measurement of how much disruptive behavior contributes to the unwanted outcomes described herein. Despite the difficulty of pinpointing a direct cause-and-effect relationship, the value of reducing disruptive behaviors, enhancing communication and team collaboration, and holding individuals accountable for their actions is clear.[37] It is not an easy process, but it must be done.

Table 3 presents an overview of a 10-step process that summarizes many of the key components necessary for program success. The primary goals should be to raise levels of awareness and accountability, enhance leadership skills, provide supportive education and training, implement and enforce appropriate policies and procedures, and endorse organizational and individual commitments to patient safety and quality care.

The first step in the process is the organizational commitment to address disruptive behaviors in the context of their negative impact on patient safety. The commitment must come from all levels of the organization, including senior-level administration, clinical leaders, frontline staff, and the governing board. Organizations must be ready and

Table 3. Addressing Disruptive Behaviors

1. Organizational culture
   - Leadership commitment, assessment, structure
2. Clinical champions
3. Recognition and awareness
   - Education
4. Structured education/Training
   - Diversity, sensitivity, stress management
   - Conflict management, assertiveness
5. Collaboration/Communication tools
6. Relationship building
7. Policies and procedures
8. Reporting mechanisms
9. Intervention
   - Pre
   - Concurrent
   - Post
10. Reinforcement of patient safety initiatives

willing to change and remodel care so as to support individuals and teams that provide direct patient care. Performing an internal assessment using a survey tool designed to assess the status of staff relationships, communication flow, team collaboration, disruptive behaviors, and patient safety will enable the organization to evaluate the current status of affairs and identify opportunities for improvement. Providing the necessary structure, resources, and personnel who are trained to deal with behavioral issues are key components of success. Those who control the budget need to understand the short-term and long-term consequences of this problem and be willing to make addressing it a priority. Having a respected peer function as a project or clinical champion can help drive the process forward.

The next step in the process is behavioral education. At the outset, education is necessary to raise levels of awareness of the seriousness and consequences of disruptive behaviors and to establish individual responsibility and accountability for one's actions. A second tier can promote a better understanding of communication styles, attitudes, and preferences and improve communication effectiveness through courses that focus on diversity training, sensitivity training, assertiveness training, stress management, and conflict management, among others. Providing programs that address differences in values and perceptions that influence the way in which individuals process and respond to information (based on age [generation], sex, culture, and personality) often helps improve understanding of individual communication styles and intentions that enhance positive work relationships and communication flow. This reduces the likelihood of misunderstanding, conflict, or a disruptive reaction. Providing more comprehensive workshops designed to improve communication efficiency and team collaboration skills has proven extremely valuable in the right clinical setting.

Providing opportunities for the staff to either formally or informally connect with each other will help improve working relationships. This could involve, for example, revised rounding procedures so that physicians consciously solicit nurses' input, informal get-togethers, town hall meetings, planned events, or task force or committee meetings during which nurses and physicians discuss ways to improve working relationships.

The organization must have a disruptive behavior policy in place, provide services for managing disruptive events, and have a process for dealing with individuals who are noncompliant. There must be a consistent process for reporting and incident investigation with appropriate follow-through and resolution. All incident reports should be reviewed by a select group of individuals who are skilled at assessing the seriousness of the situation and making appropriate recommendations for follow-up. Informal reports or one-on-one informal reporting conversations should be discouraged because they run the risk of individual biases or conflicts of interest that may undermine the seriousness of the event and impede appropriate follow-through. The entire process must remain confidential and protect against individual retaliation. Individuals who are responsible for follow-up should be trained in appropriate conflict resolution skills.

The intervention phase is crucial. Intervention can be looked at as having 3 different phases. First is the precrisis phase. Most individuals do not start the day planning to be disruptive; the stresses of the day tend to affect them. A growing literature reflects the increased stress, frustration, anger, and dissatisfaction of physicians, which results in higher rates of burnout, fatigue, and depression; in more severe cases, this may lead to substance abuse and suicidal ideation.[38-42] Many of these traits appear during medical school and residency training.[43-47] Under the right set of circumstances, these acute-phase stresses can provoke a disruptive response.[48] Identifying physicians who are at risk and working with them in a proactive, confidential, and supportive manner to help them adjust to the stresses of the environment may increase levels of satisfaction, improve relationships, enhance productivity, and lessen the likelihood of a disruptive event. Early intervention programs that emphasize coaching and support have a much greater potential for success than postevent interventions, which often acquire a more confrontational, punitive nature.[49]

When a disruptive event does occur, it must be addressed immediately. Individuals need to speak up and discuss their concerns in real time before harm is done. Empowerment, organizational support, assertiveness training, conflict management, and team collaboration training skills should enable individuals to speak up in real time.

After the event has occurred, a process must be in place to discuss the event in an effort to prevent a recurrence.

When discussing the event with physicians, there are several possible outcomes. The first is that they did not know they were doing it, they did not mean it, they are sorry that it happened, and they then take the necessary steps for self-correction. In more chronic cases, physicians may need in-depth training to modify their behaviors by taking courses in sensitivity training, diversity training, stress management, or anger management. Some physicians may require more intense individualized counseling or therapy. Always keep in mind the possibility of underlying substance abuse, medical illness, or severe personality or psychiatric disorders. Some individuals may refuse to amend their ways. With these individuals, the organization must be ready and willing to limit or suspend privileges as part of the peer review process and, if necessary, terminate their privileges or employment. Many organizations have found this to be the only option.

The last step is to integrate all these programs with the other patient safety, quality improvement, and risk management programs currently going on at the organization.

Conclusion

Disruptive behaviors can have a profound negative effect on staff relationships, communication efficiency, team collaboration, productivity, and information transfer, which can adversely affect patient safety and quality care. Disruptive behaviors can occur across all levels of the organization, but when it involves the treating physician, it raises the risk of potential compromises in patient care. It is a difficult situation to address, particularly when it involves a prominent physician who either provides needed specialty coverage or brings a large volume of patients and revenues into the organization. There is often a reluctance to act, but organizations must weigh the short-term benefits of tolerance and avoidance against the long-term consequences of affecting morale, satisfaction, reputation, efficiency, liability, and the financial consequences of adverse events. The issue is not going to go away.

Organizations must take action. Although resources may be limited based on organizational size and capacity, strategies can be developed to make effective use of current staff and readjust responsibilities and committee functions. Recommendations include raising levels of awareness and accountability, reinforcing the organizational commitment to patient safety, training and education concerning behaviors that affect communication and collaboration, and the implementation of appropriate policies and procedures that set expected standards of professional behavior and specify the ramifications for those who do not comply. Interventions must be conducted by trained individuals who have the skill set to intervene and make appropriate follow-up recommendations.

Like all health care professionals, physicians are a precious resource. Working with individuals in a proactive, confidential, nonthreatening, and supportive manner, and rallying around the benefits of improved communication and collaboration and their effect on quality and patient safety, may be a much more successful approach than passive avoidance or crisis-based intervention. Spending time and money up front to support these programs will provide a significant payback in the end. It is worth the investment.

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