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Disruptive behavior and miscommunication in health care settings

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Abstract

The idea of disruptive behavior within healthcare organizations correlates with the number of medication errors due to miscommunication. Most people would agree that miscommunication and disruptive behavior are highly related in any setting, but are extremely important to detect and diagnose in health care settings because of the direct results these behaviors may have on patient care and satisfaction. Understanding and being able to determine the problems between staff members in clinical settings is essential in deciding on recommendations for solving this problem.

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DISRUPTIVE BEHAVIOR AND MISCOMMUNICATION IN HEALTH CARE
SETTINGS

By

Meghan Stimmel

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The idea of disruptive behavior within healthcare organizations correlates with the number of medication errors due to miscommunication. Most people would agree that miscommunication and disruptive behavior are highly related in any setting, but are extremely important to detect and diagnose in health care settings because of the direct results these behaviors may have on patient care and satisfaction. Understanding and being able to determine the problems between staff members in clinical settings is essential in deciding on recommendations for solving this problem.

Let's first start by examining medical errors and how they relate to miscommunication. A medication error is defined by the National Coordinating Council for Medication Error Reporting and Preventions, as any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of the health professional, patient, or consumer (Banning, 2005, 3). These errors create a variety of problems for patients, ranging from minor discomfort to substantial change in health status that might prolong hospitalization (Banning, 2005, 1).

The idea of communication in a hospital or office setting is the most important aspect to consider when evaluating medication errors. Miscommunication can lead to results that are irreversible and sometimes fatal in a number of situations. Astonishing statistics state these preventable mistakes are the eighth leading cause of death in the U.S., with annual costs of $17 to $29 billion with an estimated 7,000 deaths each year from errors due to medical administration (Banning, 2005, 1). Not only are these errors killing thousands of people, but they are costing billions of dollars.

Now that the problem of miscommunication can be viewed as extremely problematic, it is equally as important to understand what disruptive behavior consists of because of the similar implications in regards to patient satisfaction and safety. Research has shown the relationship between disruptive caregiver behavior and adverse patient outcomes. (Blake and Rosenstein, (2008), Sirota, et. al., (2005). Such behavior increases the cost of care and causes workers at all levels to seek employment elsewhere (Potera, 2008). For this reason, the Joint Commission for Healthcare Accreditation (JCAHO) has increasingly become concerned about behaviors of all parties responsible for patient care, and has instituted a new leadership standard for accredited organizations. These organizations must create a code of conduct that defines acceptable and unacceptable workplace behavior and must also establish a formal process for managing unacceptable behavior. This standard became effective on January 1, 2009.

This new measure aims to eliminate intimidation and other disruptions; not only between nurses and physicians, but also among administrators, pharmacists, therapists, and support staff (Potera, 2008). JCAHO wishes to encourage new recommendations including, but not limited to the education of respect, responsibility, training, and documentation. "The Joint Commission is saying enough is enough," Joint Commission President Mark Chassin, M.D., said in July when the policy was unveiled. "Safe patient care is dependent on trust, teamwork and a collaborative work environment among caregivers. There's no room for these kinds of intimidating and disruptive behaviors, no matter what the reasons for them are and no matter who exhibits them." (Thrall, 2008).

The Joint Commission on Accreditation of Hospitals' 2009 leadership standards (2008) require that each hospital has a code of conduct that defines acceptable,

disruptive, and inappropriate behaviors. This distinction among disruptive, impaired, and incompetent behaviors is not purely academic; it is critical for two reasons. First, to meet the leadership standards, hospital administrators must formulate definitions. Second, a treatment plan is limited by the accuracy of the diagnosis, and a managerial and organizational intervention is limited by the accuracy of the assessment and the root cause of the problem (Martin, 2008).

Health care leaders and caregivers have known for years that intimidating and disruptive behaviors are a serious problem. Verbal outbursts, condescending attitudes, refusal to take part in assigned duties, and physical threats all create breakdowns in teamwork, communication, and collaboration necessary to deliver patient care (Blake and Rosenstein, 2009, p. 110). Horizontal and vertical violence includes all acts of unkindness, discourtesy, sabotage, divisiveness, infighting, lack of cohesiveness, scapegoating and criticism. There is a history of tolerance and indifference to intimidating and disruptive behaviors in health care. Organizations that fail to address unprofessional behavior through formal systems are indirectly promoting it (Potera, 2008).

The following graph represents the findings from the Joint Commission and was presented by Hillary Hart and Stewart L. Tubbs at the Association for Global Business conference in Florida on November, 15, 2009. It is important to note that the main cause of disruptive behavior and tragic events is communication. This allows for the understanding of the described correlation of disruptive behavior and miscommunication in healthcare settings.

Root Causes of Tragic Events
(All categories; 1995-2004)

Category
Communication
Orientation/training
Patient assessment
Staffing
Availability of info
Competency/credentialing
Procedural compliance
Environ. safety / security
Leadership
Continuum of care
Care planning
Organization culture

Average number of root causes cited per RCA = 3.1

Percent of 2966 tragic hospital events

Carole, Abbey, R.N. "Accreditation Update, " The Joint Commission, 2009.

Horizontal violence occurs between two members of a team with equal credentials. Vertical violence stems from persons in a position of authority who use it as a weapon against a subordinate. Such actions could include a manager not allowing vacation time to a certain employee, giving the new nurse the heavier workload to "give them experience" or providing preferential scheduling to other nurses (Fudge, 2006). Leiper (2005) stated the most common aggressors are usually nurse-managers and nurse-supervisors. Overt violence is quite obvious and includes forms such as criticizing a team member constantly in front of others or even screaming at another or physical assault. Covert violence includes such acts as talking behind one's back, blocking or omitting information that would help a colleague do their job, or isolating a colleague from group activities (Longo & Sherman, 2007).

A national study published by the American Association of Critical Care Nurses identified as many as 77% of nurses work with someone who is insulting, condescending or rude. Less than 1 in 10 people will speak up against an aggressor for fear of retaliation. This not only taxes the mind of the victim, it takes away from their ability to critically think about situations to provide optimal patient care (Blake and Rosenstein, 2009).

The horizontal and vertical violence that health care providers exhibit toward one another has been a long-standing problem, but only recently has come to the forefront as an accreditation issue for health care. Answers for how best to rectify this problem are urgently needed. Nurses feel alienated and lack autonomy over their working conditions (Longo & Sherman, 2007). They manifest their frustrations in the form of conflict within their own ranks. Horizontal violence is found across every aspect and specialty of nursing. Its presence decreases morale and affects all health team members physically, mentally and emotionally (Leiper, 2005). When team members oppress one another, the end results are job dissatisfaction, psychological and physical stress, errors, reduced clinical outcomes and employee turnover (Rosenstein, 2002; Kusy and Hollaway, 2009; and Porath and Pearson, 2009).

Several stages are involved in the dispersion of medication to the patient. Disruptive behavior, miscommunication or the combination of the two can lead to adverse patient outcomes. Since there are three main stages involved before a medication reaches a patient, it is important to determine the potential risk or rate of any type of error or disruption throughout all three. The first stage, prescribing, can result in inappropriate drug choice, calculation errors, inappropriate monitoring, and therapeutic duplication. Calculators and computers should be used to check calculations (Venkatraman, Durai,

2008). Errors resulting from the second stage, dispensing, may be calculation problems, inappropriate labeling, provision of inadequate information and confirmation bias in drug selection. The third and final stage, administration, is vulnerable to many errors and consumes up to 40% of work time and involves significant responsibility (Tang et al, 2004, 1). Preventable mistakes during this stage include drugs given to the wrong patient, drugs given twice/overdose, drugs given at the wrong time, by the wrong route or at the wrong rate, and wrong drug choice (Banning, 2005). According to several studies, medication errors occurring during the prescription and administration stages account for 65-87% of all errors (Tang et al, 2004, 2).

Errors are difficult to measure, not only because of inadequate reporting and varied definitions, but also because most error incidents are not single acts but a chain of events (Woolf et al, 2004). The three stages involve a physician, nurse, and a pharmacist (Tang et al, 2004). That many people involved in three different stages requires a great deal of accuracy to ensure the patients' safety needs are being met. If communication is wrong or if any type of disruptive behavior is present, there is a higher probability that error will occur.

High error rates with serious consequences are most likely to occur in intensive care units (ICUs), operating rooms, and emergency departments (IOM, 1999). ICUs are error-prone places with error rates as high as 1.7% per day, especially in pediatric and neonatal ICU wards (Tang et al, 2004, 6). All of these areas are critical places with critical patients. Miscommunication and associated errors can often be fatal and increase the overall mortality rate, especially in these highly stressful environments.

The causes of medication errors seem to be agreed upon among the authors of my

research. Human error and the lack of specific education have been strongly associated with medication errors (Banning, 2005). In the U.S., these errors have been associated with graduate nurses' mathematical incompetence and lack of appreciation of the complexity of pharmacological regimens (Banning, 2005). On a global scale, one country has taken a step to reduce errors due to lack of education. Australian student nurses must be mathematically competent before gaining their nurse registration qualification (Banning, 2005). This is a step in the right direction that addresses one potential problem for medical errors and disruptive behavior. If a member of the healthcare team has the ability to double check dosage amounts without having to consult with another member of the healthcare team, the probability that disruptive behavior will occur may decrease.

Additionally, new technology and medical advances have led to the development of a wide array of drugs on the market. A total of 656 medications were available in 1961 and now over 8000 are being prescribed, with more than 17,000 trade and generic names in North America alone (Tang et al, 2004, 2). Furthermore, mediation delivery routes, which were once limited to oral, hypodermal, intramuscular, and intravenous methods, now include patient-controlled analgesia, central venous pressure lines, subcutaneous implanted Port-A lines and arterial lines (Tang et al, 2004). Misdirected communication or illegible handwriting may cause significant doubt for the person administering the medication. If a disruptive behavior is present, a nurse or other clinical care worker, may feel uneasy about asking for a more clear direction relating to medication administration or other issues.

Another cause is the heightened awareness regarding understaffing of nurses

throughout hospitals. This understaffing leads to hurried working environments, reduced attention to work details, diminished quality of care, and the promotion of error (Tang et al, 2004). Their heavy work loads contribute to less attention on the patients' needs, and more emphasis on getting the job done. Although nurses are encouraged to use standard protocols in administering drugs and to avoid interruptions, the reality of time pressures and excessive workloads cause them to modify protocols, resulting in error-prone situations (Tang et al, 2004). Ultimately, communication and collaboration of physicians and nurses could lead to the decrease of medical errors. All of the indicated factors that seem to cause these mistakes could be eliminated with integration of new systems.

Medication errors seem to be extremely prevalent in the elderly population. Research done by a group of RN's in Taiwan indicates that older patients over 60 years of age commonly experience errors in medication administration (Tang et al, 2004). This is usually related to complicated prescriptions and the number of contradicting drugs. Hospital personnel also must consider older people's increased vulnerability to side effects (Banning, 2005). Communication regarding this type of problem may be reduced with increased conversation with the patients about various side effects they may be experiencing. Conversation with doctors is also vital regarding issues related to polypharmacy.

Although this is a problem in the United States, it is also a problem for hospitals around the world. The United Kingdom's Medical Defence Union (MDU), reported that in less than 50% of cases regarding medical error, injury to the patient was permanent; such as scarring, nerve damage, or stroke, and that almost a fifth of the cases resulted in death, stillbirth, and/or termination of pregnancy (Banning, 2005, 4). Because of these

studies, they founded an organization called the National Patient Safety Agency (NPSA), that monitors medication errors and prescribing practices (Banning, 2005, 2).

A study conducted throughout Canada compared the effectiveness of an existing unit dose system using a medication cart, to a new system where medications are decentralized to a locked cupboard at the patients beside (Bennett et al, 2006). In an interview prior to the distribution system being implemented, 32% of nurses thought frequent interruptions or distractions contributed to medication errors (Bennett et al, 2006, 2). It is quite possible these distractions and interruptions are a type of disruptive behavior.

The new system seemed to work more effectively for all involved. It provided close proximity of medications to patients, and nurses experienced 64% fewer interruptions (Bennett et al, 2006, 3). The changes in work process led to changes in interactions with patients, families, and colleagues as well as improved access to materials. It also created an opportunity to ask patients questions, to verify information, and to provide education (Bennett, et al, 2006). Nurses and pharmacists associated the medication system redesign with significantly enhanced patient safety and work satisfaction. Such a small change created positive and increased communication among colleagues, as well as with patients.

An additional study was conducted in Taiwan among hospital nurses. The study investigated nurses' views on the factors contributing to medication errors in the hope of facilitating improvements to medication administration processes (Tang et al, 2004). The authors of the study, all RN's, developed a questionnaire and received responses from 72 female nurses. Of the respondents, 86.1% believed errors were the result of personal

neglect, 37.5% related the mistakes to heavy workload, and 37.5% to new staff (Tang et al, 2004, 1). Conditions related to personal neglect included advanced drug preparation without rechecking and interruptions by others. Further conditions resulting in error were related to complicated doctor-initiated orders, such as unclear expression, and complicated orders in general (Tang et al, 2004). Medical wards (36.1%) and intensive care units (33.3%) were the two most error prone places (Tang et al, 2004, 1). Types of medication errors involved were wrong dose, wrong drug, wrong time, wrong patient, and wrong route. The highest type of mistake was wrong dose at 36.1% (Tang et al, 2004, 6). Miscommunication appeared to be a component of many errors. Administration of wrong dosage, among other errors, could have been avoided had there been more communication involved or if the clinical workers involved weren't skeptical of potential disruptive behavior.

Another study that demonstrates collaborative efforts on a global scale to reduce medication errors, involves the LINNAEUS Collaboration; a group of investigators in six countries. These investigators, concerned with patient safety in primary care, launched the Primary Care International Study of Medical Errors (PCISME) study in 2001 (Woolf et al, 2004). The six countries involved included the United States, Canada, England, the Netherlands, Australia, and New Zealand. From June to December 2001, 73 primary care physicians in the six countries used a secure Internet connection to file 431 anonymous reports of errors observed in practice (Woolf et al, 2004, 2). My research showed results from 75 reports filed by the U.S. participants. These included 18 family physicians from five middle Atlantic, Northeast, and Midwestern states (Woolf et al, 2004).

The results of this study were largely based on communication or lack of. Although 68% were treatment errors, a shocking 17% were errors in communication (Woolf et al, 2004, 5). Additionally, while mistakes in treatment and diagnosis accounted for 83% of distal errors, 80% of proximal errors consisted of mistakes in communication (Woolf et al, 2004, 4).

Of the 64 errors in communication reported by the physicians, 90% constituted informational miscommunication that is potentially preventable through the use of computers or other information systems. These errors included breakdowns in communication among colleagues and with patients that are potentially avoidable through electronic communication and other strategies (44%), and misinformation in the medical record that might be prevented by automated data entry (21%). Breakdowns in processing patient requests and messages (18%), inaccessible medical records (12%), and the absence of reminder systems (5%) all accounted for errors in communication throughout this particular study (Woolf et al, 2004).

Through all of the efforts and research involved in minimizing the occurrence of medication errors, a glitch in the system seems to commonly occur. Many nurses are skeptical about admitting their administration errors once they have taken place. Feelings of shame, guilt, and fear of punishment may cause nurses to be reluctant to report their mistakes (Tang et al, 2004). Although some sort of punishment is often inevitable, does that punishment ultimately assist in the solution of the problem? The Institute of Medicine (IOM) doesn't seem to think so. When an error occurs, blaming an individual, which is a form of disruptive behavior, does little to make the system safer and little to prevent someone else from committing the same error (IOM, 1999).

Although most of the errors seem to be committed by nurses during the administration process, nurses are pivotal to improving patient outcomes and are excellent evaluators of the work environment for deficits and solutions for quality improvements (Fletcher, 2002). Authors of the study done in Taiwan believe the main issue in current research is to gain participants' willingness and trust so they will release the information regarding the medication errors in which they have been involved (Tang et al, 2004). If nurses feel they will be punished severely for their errors, they will be less willing to assist in research efforts. Without this research, it is harder to solve the problem.

When shifting the focus to the idea of disruptive behavior, miscommunication seems to be the result of this type of behavior within health care organizations. When clinical members are feeling threatened or apprehensive in relation to clearing up confusion on medication dispersion and administration techniques, they are less likely to ask for help in fear of a disruptive situation resulting.

This particular issue has been becoming more prevalent throughout the hospital environment. At the 75th Annual Congress of the American College of Health Care Executives, the speaker for the 2008 Bachmeyer Address delivered a call for coordinated, organizational action by healthcare leaders and managers entitled "The Human Aspects of Quality Improvement" (Martin, 2008). In February 2008, the Center for American Nurses adopted its statement on Lateral Violence and Workplace Bullying (Martin, 2008). On April 9, 2008, in Daniel H. Raess v. Joseph E. Doescher, the Indiana Supreme Court affirmed a jury award of $325,000 to a former St. Francis Hospital employee who had accused a prominent heart surgeon of bullying him and in March 2008, New York

state legislators passed a bill establishing a cause of action for employees who are subjected to an abusive work environment (Martin, 2008).

In regards to the positional hierarchy within a hospital organization, old nurses may feel threatened by new nurses and surround themselves with defensiveness. This action may reduce the effectiveness of communication and cause the interpersonal relationships between nurses to decline. We can be supportive in all our interpersonal relationships if we know more about several of the responses that reduce or arouse defensiveness-that is, behaviors used to protect ourselves from what we perceive to be a threat (Tubbs, 2008).

More importantly, the behavior that JCAHO seeks to eliminate heavily interferes with patient care. Incivility and bullying both occur within and among several clinical disciplines and have critical consequences. Most verbal abuse involving nurses is instigated by physicians (Johnson, DeMass, and Marker-Elder 2007). When repetitive verbal assaults and intimidation escalate, this hostile behavior eventually interferes with delivery of patient care and results in unsafe clinical performance. In one study, 70 percent of nurses reported they often or sometimes encountered condescending language or voice intonation, and 23 percent reported personal encounters with strong verbal abuse by physicians/prescribers. In this same study, 49 percent or almost one-half of the respondents, stated that intimidation interfered with the manner in which they clarified medication orders or dispensed medication, or they actually administered medication despite concerns (Institute for Safe Medication Practices 2004). The findings of this study are alarming (Felblinger, 2009).

Further effects of disruptive behavior in a health care setting are problematic at a

variety of levels. At the governance level, this behavior can lead to aggressive

disciplinary action by the governing body. At the physician level, it can strain referral,

coverage, leadership and peer review activities. No issue so compels the complexity and

dynamics of ensuring a safe environment with quality delivery of patient care than

confronting a physician whose behavior is disruptive (Piper, 2003). The behavior sends a

negative ripple in the sense of harmony and safety in the one setting where these attitudes

are paramount for quality patient care (Piper, 2003). Additionally, nurse-physician

relationships may be strained and essential communication could be disturbed. At the

most important level, patient quality of care could potentially be affected, costing health

systems more money and threatening consumer well being (Youssi, 2002).

The financial and monetary costs of incivility, bullying, and associated disruptive

behaviors appear in several arenas. These include turnover, turnover intentions,

absenteeism, organizational commitment, patient safety, and employee healthcare

(Felblinger, 2009). When turnover increases, agencies often end up recruiting

inexperienced registered nurses and absorb the associated recruitment and orientation

costs. Unless disruptive behaviors are dealt with, nurses arrive and then leave through a

costly and constantly revolving door (Felblinger, 2009). Not only can these behaviors

raise financial instability and create adverse patient outcomes, but employee health and

well-being may be negatively affected as well. These consequences result in higher

financial obligations for the institution in regards to employee turnover, longer patient

stay, etc (Felblinger, 2009).

"Many hospitals already have policies against disruptive and inappropriate

behavior", says Nancy Foster, vice president for quality and patient safety for the

American Hospital Association. She offers insight in regards to complying with the Joint Commission standard, "It's a matter of making sure the policies are dear and inclusive of all practitioners but, it's been challenging for hospitals to make the same standards apply to physicians who are not employees" (Thrall, 2008). Many physicians who have hospital privileges, are not hospital employees, and therefore may feel as though the hospital's governing rules do not apply to them.

Healthcare consists of many individuals within a large hierarchy. These people have different titles that vary among levels and are associated with varying levels of education and salary. When a group of people with large egos come together in a situation, progress may be hindered and the environment may become a haven for disruptive, bullying behavior (Felblinger, 2009). There is a good chance the person with higher status will control the topics of conversation as well as the length of the discussion. Higher status may even enable that person to avoid the discussion entirely (Tubbs, 2008). Physicians may feel as though their status trumps the status of nurses or other clinical staff. Instead of valuing the ideas and concerns of the equally important team members, these physicians may think they know more because of their higher status.

Victims of horizontal violence may have problems sleeping, develop low-self esteem, have poor morale, become disconnected from peers, display depression and accrue excessive sick leave (Longo & Sherman, 2007). The increased stress and feelings of isolation may make a person reluctant to ask for help from colleagues, which increases the chances for medical errors thus endangering patients. As students of various disciplines pass through internships and experience hostility, they may be unwilling to

start their career with that facility due to their negative experience. Recent research shows that 27% of new graduate nurses have voluntary resigned from an organization within their first year of employment based on their feelings of "being hung out to dry." Leiper, in 2005, reported that within a study conducted of 551 nursing students, 34% reported other nurses being rude, verbally abusive, humiliating, or unjustly critical. This number severely cripples the organization's ability to recruit new prospects in attempts to increase patient safety and satisfaction initiatives.

Exposure to horizontal and vertical violence stifles employees' enthusiasm for the profession and undermines the ability of a health care organization to create a satisfied workforce (Longo & Sherman, 2007). The majority of nurses feel their profession is not good if one wishes to feel respected in their jobs (Longo & Sherman, 2007). Studies have indicated that horizontal and vertical violence are significant reasons why many nurses leave their work settings, and in some cases leave the profession altogether. This is at a time when the national nursing shortage is on the increase. Another study revealed that 75% of 2,000 nurses interviewed believed the profession "eats their young" (Baltimore, 2006). Seasoned employees who feel devalued may also retire early, depriving patients of receiving quality care from experienced providers and leaving novice nurses to fend for themselves without proper guidance. When nurses view every workday as negative, they tend to seek another situation. The nurses who jump ship tend to be the brightest and best (Christmas, 2008). With the projected nursing shortage to last well into the next two decades, solutions to this problem must be found soon. (Christmas, 2008).

A similar study concluded nurses and physician's perceived disruptive behavior

as having negative or worsening effects on stress, frustration, concentration, communication, collaboration, information transfer, and workplace relationships (Rosenstein, O'Daniel, 2005). Even more upsetting was the respondents' perceptions of negative or worsening effects of this behavior on adverse events, medical errors, patient safety, patient mortality, the quality of care, and patient satisfaction (Rosenstein, O'Daniel, 2005). In addition, nearly half of clinical employee respondents from a study conducted by VHA Inc. said they were aware of an event that could have occurred because of disruptive behavior, and 19% said they knew of an adverse event that occurred as a direct result of disruptive behavior (Anonymous, 2006).

Porath and Pearson (2009) report that in the past decade, that a...

"Common (and generally tolerated) antisocial behavior at work is far more toxic than managers imagine. Berating bosses; employees who take credit for others' work, assign blame, or spread rumors; and coworkers who exclude teammates from networks— all of these can cut a swath of destruction that's often visible only to the immediate victims. Targets of bad behavior become angry, frustrated, and even vengeful. Job satisfaction falls, and performance plummets. Some employees leave. But those who stay may take a bigger toll on the organization. As a senior vice president of a *Fortune* 50 firm told us, "They can and do sit in the boat without pulling the oars...and that may be worse than leaving.""

Based on their study of several hundred U.S. workers (in all types of organizations), disruptive behaviors cause the following outcomes:

80% lost work time worrying about the incident,

78% said their commitment to the organization declined.

66% said their performance declined,

63% lost time avoiding the offender

48% decreased their work effort,

47% decreased their time at work, and

38% decreased their work quality.

The current authors contend that this is a systemic issue and must be dealt with on a system-wide basis (Tubbs, 2009A; Tubbs, 2009B; Tubbs, Husby and Jensen, 2009).

Practicing high-quality medicine in today's environment involves the collaboration of individuals who have unique experience, training and skills and appreciation of each person's contribution (Thrall, 2008). Surveys are useful, but management needs to go a step further to make sure hospital staff and employees are aware of the severity relating to all types of disruptive behavior. Other actions that may serve as solutions include administering a "gap analysis". This analysis considers policies already in place that aim to prevent unacceptable behavior and then enlarge these policies to include other abusive, intimidating, and obnoxious behavior (Thrall, 2008).

Alan Rosenstein, Vice President and Medical Director for VHA West Coast in Pleasanton, California thinks that hospitals need to work on behaviors in the same way they tackle other patient safety issues. He goes on to explain, "When the first Institute of Medicine report on errors came out the idea was if we just get a better system, better computers, we would have better outcomes, but human factors are so crucial. If an adverse event occurs and gets traced back to inappropriate behaviors and you didn't do anything about it, your reputation is shot" (Thrall, 2008). Aiming towards the positive

end of the spectrum, employees within hospital organizations might find it beneficial to demonstrate behavior along the lines of courtesy, honesty and respect.

Research is constantly being conducted to find ways to prevent medical errors and disruptive behavior, and several recommendations are available to help reduce their prevalence. Electronic prescription systems are a new concept that may help to avoid administering wrong medicines and wrong doses (Venkatraman, Durai, 2008). These computerized prescriptions have also been shown to reduce outpatient prescription errors (Venkatraman, Durai, 2008). Authors of the study done in Taiwan think this system may eliminate 80% of prescribing errors (Tang et al, 2004, 2). Words typed up on a computer will make it easier for nurses to view correct doses and routes that may have previously looked confusing when relying on a physician's handwriting.

Many authors and researchers offer several recommendations to reduce medication errors. Through my own research, I have narrowed down the large list to include the suggestions I found most important. All drug orders should be verified before medication administration and nurses should carefully review original medication orders and compare these with the medication dispensed (Banning, 2005). Doses should not be administered unless the meaning of the original order is clear and unambiguous, and there are no questions about the appropriateness of the prescribed regimen. Also, administration of medication doses should be documented upon completion (Banning, 2005).

When standard drug concentrations/strengths or dosage charts are not available, dosage calculations, flow rates, and other mathematical calculations should be double-checked by a second individual (Banning, 2005). These mostly apply to injections and

controlled drugs. If there are questions when a large number of dosage units are needed

for a single patient dose, the medication order should be verified (Banning, 2005).

Electronic prescribing and patient/medicine identification by bar codes, double checking

and using color coded syringes for intravenous (IV) and enteral administration,

employing more clinical pharmacists and providing regular education may reduce

medicine-related errors as well (Venkatraman, Durai, 2008). With a bar-coding system,

nurses can scan the code on their badge, every patient's wristband, and every drug to

ensure the right drug is administered in the right dose to the right patient (Nicol,

Huminski, 2).

Other recommendations include the use of computer technology for avoiding

errors from illegible prescribing (Venkatraman, Durai, 2008). As stated previously, a

physician's handwriting can often be hard to determine. Avoiding the use of unsafe

abbreviations relates back to the idea of written communication and how vital clear

handwriting is within an environment lacking computerized prescribing (Banning, 2005).

Using a computerized system would assist in reducing unclear directions to nurses,

therefore reducing errors.

A study published in the journal *Health Services Research* shows a 66% drop in

medication errors among U.S. hospitals that switched to computerized prescribing

(Private Practice Success, 2007).According to published background information,

illegible handwriting and transcribing errors are responsible for up to 61% of medication

errors, and each year those errors injure or kill more than 500,000 U.S. hospital patients,

reports *HeathDay News* (Private Practice Success, 2007). The study's authors conclude

that computerized ordering will be more effective when it's linked to other

"computerized systems to detect and prevent prescribing errors" (Private Practice Success, 2007). Injuries resulting from drug use account for up to 41% of all hospital admissions, costing more than $2 billion in inpatient costs. Earlier studies had suggested that as many as a quarter of those inpatient adverse drug events might be prevented through the use of computerized physician order entry and related computerized medication ordering and administrative systems (Industrial Engineer, 2005).

It is extremely important for hospital systems today to switch to a new system of computerized ordering in order to reduce miscommunication and medication errors in health care systems. Physicians and nurses will better be able to observe directions and information regarding dosage and administering medications. These systems have already reduced mediation errors and spending in several hospitals and health care systems across the world. Many lives have been saved, patients overall health and well being have been spared, and millions of dollars have been saved. A recent study conducted in Massachusetts estimated that the average victim of mediation error stays in the hospital at least four extra days (Adverse Event Reporting News, 2008). Community hospitals in the state may not have a choice but to implement such computerized systems, based on increasing pressure from insurers who see computerized systems enhancing patient safety and saving money (Adverse Event Reporting News, 2008).

The integration of clinical pharmacists into clinical teams may help when double checking is needed (Venkatraman, Durai, 2008). This allows the one administering the medication, particularly the nurse, more than one person to double check medication instructions with. If the physician is busy and cannot answer questions, the nurse would then have the option of asking the available clinical pharmacist and vice versa.

Another recommendation by the same author is to read out the prescriptions and explain the need to the patients (Venkatramen, Durai,2008). Allowing the patient to hear and notice their medication administration may allow the nurse to catch an error before it occurs (Banning, 2005). All of these recommendations can help to improve communication within a health care institution and reduce errors.

An additional method found to be successful in analyzing what leads up to error is known as Failure Mode and Effects Analysis (FMEA). This method has recently been integrated into healthcare, following other industries including aviation, space, automobile manufacturing, and chemistry (Fletcher, 2002). The goal of FMEA is to predict possible failures in systems designed to detect errors and alert staff, eliminate the possibility of intolerable errors, trap the error before it reaches a patient, or if all else fails, minimize the consequence of the error (Fletcher, 2002). It concentrates on the system that might allow injury, rather than blame the individual who made the mistake (Fletecher, 2002). All of the goals comprised within this method require the cooperation and communication among all staff members and personnel employed within a health care institution.

Additionally, the effects of medical errors continue long after the patient leaves the hospital. Medical error studies that focus on the inpatient stay can underestimate the impact of patient safety events by up to 20-30 percent (Encinosa, Hellinger, 2008). Computerized systems can also assist with outpatient care and should be utilized.

If medical errors were recognized by the Centers for Disease Control and Prevention in its annual National Vital Statistics Report, they would be ranked as the sixth leading cause of death in the United States (Industrial Engineer, 2005).

Many factors can lead to medication error, including the prescribing process, dispensing error, a failure of the checking process, a poorly controlled drug distribution and administration system, and interruptions and disruptions that occur during the entire process (Bennett et al, 2006). All of these factors are related to lack of communication and disruptive behavior within the workplace. High risk medicines should be checked with a second qualified person and signed on the prescription chart. Medication errors can be minimized by double checking medications, crew resource management, computerized entry and incident reporting. There are also measures that should be taken when dealing with disruptive behavior incidents that are very similar.

The first step to a functional organizational culture is a psychologically and physically safe culture. To develop a safe culture, administrators should first write and publish behavioral expectations for all employees and manage adherence to those expectations with the same diligence as with a balance sheet, income statement, marketing plan, or the Joint Commission on Accreditation of Hospitals (2008) requirements (Martin, 2008). Second, administrators should address complaints of workplace bullying if they arise. One empirical investigation found that less than half of all nurses were satisfied with the response of their organization when they complained of workplace bullying (Martin, 2008). Third, administrators should approach bullying as an organizational-development intervention and should leverage existing resources, such as the Call for Action of the American Association of Critical-Care Nurses Zero Tolerance for Abuse position statement, which falls under their Healthy Work Environment initiative (Martin, 2008).

Documentation is an additional aspect that is equally as important as policy making and implementation. It is imperative that any action taken against a disruptive physician be documented. Documentation is especially important since leaders of the medical staff are likely to change (Lapenta, 2004). Without documentation, there is no institutional memory of previous attempts to change the physician's behavior. The documentation should include date and time of the incident, a factual description of the questionable behavior and circumstances that precipitated it, names of witnesses, consequences of the behavior as it relates to patient care or hospital operations, and any action taken to remedy or intervene in the behavior (Lapenta, 2004). All documentation should be kept in a central place, typically the physician's credentials or quality file. The physician should have an opportunity to see any documentation that is created and to respond to it. A secret or private file creates both legal and practical problems and should be avoided (Lapenta, 2004).

As of October 1, 2008, the Centers for Medicare and Medicaid Services (CMS) will no longer reimburse hospitals for eight preventable conditions: patient falls, pressure ulcers, urinary tract infections, vascular-catheter-associated infections, mediastinitis, air emboli, removal of objects left in the body during surgery, and injury caused by use of incompatible blood products. In short, CMS ends coverage for hospital errors (Martin, 2008).

Although medication errors and disruptive behavior can alter a patient's health or overall well-being, they are also responsible for the diminished trust and satisfaction of the hospital industry and health care personnel. The Quality of Health Care in America Committee of the Institute of Medicine (IOM) concluded that it is not acceptable for

patients to be harmed by the health care system that is supposed to offer healing and comfort; a system that promises, "First, do no harm" (IOM, 1999). Even when using the lowest estimates available, preventable medical errors in hospitals exceed deaths attributed to such feared threats as motor-vehicle wrecks, breast cancer, and AIDS (IOM, 1999).

Miscommunication and disorderly behavior are, fortunately, things that can be fixed or solved in many areas of health care institutions.   Promising research gives hope to solve this crisis that involves all parts of the globe and many communication techniques are being developed to reduce occurrence.   It may be part of human nature to err, but it is also part of human nature to create solutions, find better alternatives, and meet the challenges ahead (IOM, 1999).

References:

Anonymous (2006). Study: Disruptive Behavior in the OR Can Affect Patient Outcomes. *Healthcare Financial Management.*60, 8, (#) 25.

Baltimore, J. (2006). Fact or Fiction? In an Effort to Diffuse Mounting Tensions Between Horizontal Violence in the Workplace. *Nursing Management.* 37, 5.

Banning, M. (2005). Medication Errors: Professional Issues and Concerns. *Nursing Older People, 18, (#)* 27-32.

Bennett, J., Femson, L., Tone, J., Rajmohamed, Y. (2006). Improving Medication Administration Systems: An Evaluation Study. *The Canadian Nurse, 102,* (#): 35-40.

Blake, H., Rosenstein, A. (2008). Disruptive Physicians Threaten Patient Safety More Than you May Realize. *Healthcare Risk Management.* 30(10), (#)109-120.

Christmas, K. (2008). How Work Environment Impacts Retention. *Nurse Economics.* 26(5), (#)316-318.

Felblinger, D. (2009). Bullying, Incivility, and Disruptive Behaviors in the Healthcare Setting: Identification, Impact, and Intervention. *Frontiers of Health Services Management.* 25,4, (#)13-23.

Fletcher, C. (2002). The Need to Address Hospital Politics in Order to Reduce Medication Errors: A Case Study. *Policy, Politics, & Nursing Practice, 3,* (#): 66-72.

Fudge, L. (2006). Why, When we are Deemed to be Carers, Are we so Mean to our Colleagues?" [Electronic version]. *Canadian Operating Room Nursing Journal*, 24, 4, (#)13-16.

Hutton, S. (2006). Workplace Incivility: State of the Science. *The Journal Of Nursing Administration. (#)* 22-28.

Institute of Medicine. (2000). To Err is Human: Building a Safer Health System. Washington D.C. Department of Health and Human Services.

Johnson, C.L. and S. Markle-Elder. (2007). Stopping Verbal Abuse in the Workplace. *American Journal of Nursing*, 107, (#)32-34.

Kusy, M., Holloway, E. (2009). Toxic Workplace: Managing Toxic Personalities and Their Systems of Power. San Fransisco: Jossey-Bass.

Lapenta, S. (2004). Disruptive Behavior and the Law. *Physician Executive.* 30.5, (#) 24.

Leiper, J. (2005). Nurse Against Nurse: How to Stop Horizontal Violence [Electronic version]. *Nursing.* 35, 5, (#)44-45.

Longo, J., & Sherman, R. (2007). Leveling horizontal violence [Electronic version]. *Nursing Management.* 38(3), (#)34-51.

Martin, W. (2008). Is Your Hospital Safe? Disruptive Behavior and Workplace Bullying. *Hospital Topics: Research and Perspectives on Healthcare, 86,* (#): 3.

Martinko, M., Gundlach, M., Douglas S. (2002). Toward an Integrative Theory of Counterproductive Workplace Behavior: A Causal Reasoning Perspective. *International Journal of Selection and Assessment.* 10, (#)36-50.

Nicol, N., Huminski, L. (2006). How we Cut Drug Errors. *Modern Healthcare, 36,* (#): 38.

Piper, L. (2003). Addressing the Phenomenon of Disruptive Physician Behavior. *The Health Care Manager,* 22,4, (#)335-339.

Porath, C., Pearson, C. (2009). How Toxic Colleagues Corrode Performance. *Harvard Business Review.* April, (#)35.

Potera, C. (2008).
Pulich, M., Tourigny, L. (2004). Workplace Deviance: Strategies for Modifying Employee Behavior. *The Health Care Manager.* (#)290-301.

Rosenstein, A., O'Daniel, M. (2005). Disruptive Behavior & Clinical Outcomes: Perceptions of Nurses& Physicians: Nurses, physicians, and administrators Say that Clinicians' Disruptive Behavior has Negative Effects on Clinical Outcomes. *Nursing Management.* 36(1) (#)18-28.

Sirota, D., Mischkind, L., Meltzer, M. (2005). The Enthusiastic Employee. Philadelphia, Wharton School Publishing.

Tang, F., Sheu, S., Yu, S., Wei, I., Chen, C. (2004). Nurses Relate the Contributing Factors Involved in Medication Errors. *Journal of Clinical Nursing, 16,* (#): 447-457.

Thrall, T. (2008). No Bad Apples. *Hospitals and Health Networks, 82,*12, (#) 42-45.

Tubbs, Stewart L. and Sylvia Moss. Human communication: Principles and contexts. New York: McGraw-Hill, 2008.

Venkatraman, R., Durai, R. (2008). Errors in Medicine Administration: How Can Be Minimized? *The Journal of Perioperative Practice, 18, (#):* 249-253.

Weber, D. (2004). Poll Results: Doctors' Disruptive Behavior Disturbs Physician Leaders. *The Physician Executive*. p. 6-14.

Woolf, S., Kuzel, A., Dovey, S., Philips, R. (2004). A String of Mistakes: The Importance of Cascade Analysis in Describing, Counting, and Preventing Medical Errors. *Annals of Family Medicine, 2,* (#): 317-324.

Youssi, M. (2002). JCAHO Standards Help Address Disruptive Physician Behavior. *The Physician Executive.*