



# Workplace Violence and Disruptive Behavior in Washington Psychiatric Settings

**Safety & Health Assessment & Research for Prevention (SHARP) — Research for Safe Work**



## Highlights

In a study supported by 2 psychiatric healthcare organizations' management, the Union of Physicians of Washington, SEIU 1199NW, and WFSE Unions, the National Institute for Occupational Safety & Health (NIOSH), and the Washington Department of Labor & Industries, SHARP researchers found that the organizational context resources are high, care providers report significantly fewer patient assaults and less coworker to coworker disruptive behavior. The resources examined in the study include staffing adequacy, schedule control and satisfaction, violence prevention climate, and organizational, family-supportive supervisory, and coworker social support.

## Introduction

The growing demand for healthy workplaces creates a climate in which patient safety and direct care provider well-being have become critical strategic priorities for healthcare. Research can help identify and prioritize key organizational influences on workplace violence and disruptive behavior and increase understanding of how direct care provider working conditions influence workplace violence outcomes.

An important focus of this study was to examine the organizational context as it pertains to Type II (violence directed at employees by customers, clients, patients, or any others for whom an organization provides services) and type III (coworker to coworker) workplace aggression in psychiatric settings.

Workplace violence has been recognized as a significant performance and health concern for nurses and nursing staff (e.g., Lanza, 2006). In a multiregional study of 557 nursing staff members from various acute psychiatric settings, researchers found that 76% of the respondents reported that they were assaulted at least once. Previous research on psychiatric hospital employees in Washington State has shown significant occupational risks for injury due to assault. More recent research reported that 43% of surveyed staff at a university department of psychiatry were threatened and a quarter were physically assaulted. Evidence suggests that workplace violence significantly influences the recruitment and retention of nurses, turnover intentions, absence due to sickness, and high levels of burnout (Jackson, 2002).

Some research links risk of assault to schedule control factors. In a Veterans Hospital Administration study of the hospital psychiatric nursing population, Hodgson and colleagues (2004) found that

working as float staff or on mandatory overtime schedules increased the risk of experiencing assault. Other researchers have examined protective psychosocial organizational factors. In a study examining risk and protective factors for workplace violence, Findorff and colleagues (2004) found that increased supervisor support decreased the odds of physical and non-physical violence.

Coworker to coworker aggression, known as disruptive behavior in health care, has been identified as commonly occurring in healthcare settings and part of medical culture. The Joint Commission, an accrediting agency for hospitals, has called on health and hospital organizations to address disruptive behavior and change their cultures. The Joint Commission defines disruptive behavior as conduct that undermines a culture of safety (2008) and includes, but is not necessarily limited to, the following examples of actions toward colleagues, hospital personnel, patients or visitors:

- Hostile, angry or aggressive confrontational voice or body language;
- Attacks (verbal or physical) that go beyond the bounds of fair professional conduct;
- Inappropriate expressions of anger such as destruction of property or throwing items;
- Abusive language or criticism directed at the recipient in such a way as to ridicule, humiliate, intimidate, undermine confidence, or belittle.

Health researchers have noted that the impact of disruptive behavior is costly for organizations – it causes distress among other staff, undermines productivity, leads to low morale and high staff turnover, and results in ineffective, substandard patient care, poor adherence to practice guidelines, medical errors and adverse outcomes, loss of patients, and malpractice suits (Rosenstein & O'Daniel, 2005; 2008; TJC, 2008). Co-worker and supervisor conflict have been shown to be statistically significant risk factors for an elevated employee need for recovery, prolonged fatigue, and turnover. In prior research, co-worker conflict was also predictive of poor general health. Witnessing workplace bullying and incivility has also been linked to a higher risk of future depressive symptoms.

## Organizational psychosocial resources

### Staffing adequacy

Prior research suggests that low staffing levels are related to lower nurse ratings of quality of patient care. Specifically, in a study of hospital nurses across five different countries, researchers found that nurses in poorly staffed hospitals (e.g., high patient-to-staff ratios) with the least organizational support for nursing care were most likely to rate patient quality of care as low (Aiken, Clarke, & Sloane, 2002). In terms of nursing outcomes, researchers examined nurse-staffing levels and found higher patient workloads were linked to greater job dissatisfaction, burnout, and turnover, and lower nurse-perceptions of quality of patient care. Finally, in a study examining the effect of California's 1999 law mandating minimum staffing levels in hospitals, findings suggested that increased staffing led to better patient outcomes (McHugh, Kelly, Sloane, & Aiken, 2011).

### Schedule control and schedule satisfaction

Schedule control, defined here as the ability to determine when one works, where one works, and how many hours one works, is a complementary dimension of job control. Psychological and physical strain are more likely when workers face high psychological work demands and when workers have little control over when or how work is done. There is evidence that high job demands and low job control are associated with poorer mental health and with poorer physical health.

Research has shown that flexible work arrangements that increase worker control and choice (such as self-scheduling) reduce stress and healthcare costs; improve productivity and job satisfaction; increase retention; decrease absenteeism; and improve loyalty and commitment. Employees working flexibly are more satisfied with their jobs, more satisfied with their lives, and experience better work-family balance. In a review of ten studies of flexible work conditions, Joyce and colleagues (2010) found that flexible work interventions that increase worker control and choice (such as self-scheduling

or gradual/partial retirement) are likely to have a positive effect on employee health outcomes. These include primary health outcomes (including systolic blood pressure and heart rate; tiredness; mental health, sleep duration, sleep quality and alertness; self-rated health status) and secondary health outcomes (co-workers' social support and sense of community). In the ten studies no ill health effects were reported for flexible work schedules.

### **Violence prevention climate**

Violence prevention climate has emerged as the most consistent antecedent of workplace violence in the occupational health psychology research literature. Researchers conceptualized violence prevention climate as employees' perceptions of organizational policies, practices, and procedures regarding the control and elimination of workplace physical violence and verbal aggression. Violence prevention climate refers to performing core and supportive activities that are designed to limit violent or aggressive incidents in the workplace. Specifically, a positive prevention climate indicates that there are clear organizational policies, practices and responses to support care provider efforts for preventing violent or aggressive incidents. In addition, strong management support exists to assist care providers with their individual efforts to prevent assaults and disruptive behavior among coworkers, or to cope with the negative consequences of being victimized.

### **Organizational support**

Perceived organizational support (POS) reflects employees' sense that their organization values them, recognizes their contributions, and is concerned with their welfare. According to POS theory, employees who experience stronger support from senior management will respond with more favorable job attitudes and behavior, and should have more favorable work outcomes such as higher job satisfaction and higher perceptions of quality patient care. In a meta-analysis of over 70 studies on POS, this proposal was strongly supported, showing that employees with higher POS report less work stress, more favorable job attitudes, stronger organizational commitment, increased job performance, and lower turnover.

### **Family supportive supervisor behaviors**

Supervisors show support for employees through actively engaging in family supportive supervisor behaviors (FSSB). These are behaviors that assist employees in managing their work and family demands. Several studies have demonstrated beneficial outcomes associated with family supportive supervisor behavior, including lower levels of work-family conflict and turnover intentions, and higher levels of work-family positive spillover and job satisfaction (Hammer et al., 2009). Supervisor support has been established as a factor in employee well-being. Supervisors are an important resource that employees go to for assistance with work and personal problems. In addition, supervisors implement workplace policies and procedures or "family friendly policies" to help employees manage work and family concerns. These family friendly supports may be provided as formal or informal support. Examples of formal supports include violence prevention policies, Employee Assistance Programs (EAPs), employee benefits, and flexible schedule arrangements. Informal workplace supports include listening, expressing concern for the employee's recovery from an assault injury, and finding a way for an employee to adjust their work schedule to handle an urgent family situation.

### **Coworker support**

Support from coworkers can occur in multiple forms, including emotional (e.g., listening to a coworker's difficulties in balancing work and family) and instrumental (e.g., offering to help a coworker with a difficult client). In general, social support has been linked with positive employee outcomes, including health, work attitudes, and work behavior (Cohen & Wills, 1985). The presence of support has been shown to interact with workplace stressors to lessen the negative impacts of stress on well-being outcomes. A study of healthcare setting employees found that instrumental organizational support (including coworker support) weakened the impact of physical violence, aggression, and vicariously experiencing violence in the workplace on employee outcomes including emotional well-being, somatic health, and job-related affect.

### **Sample and methods**

In the current study, SHARP researchers conducted surveys in two psychiatric healthcare settings and examined the relationships between organizational psychosocial contextual resources with workplace violence, specifically, care providers' experience of physical assault by patients as well as disruptive behavior and witnessing such behavior from coworkers.

Survey data were collected from 479 direct care providers working at two psychiatric settings in the Northwest U.S. Participants were recruited through organizational intranet postings, email notices, and various care provider and union meetings. Survey participation was voluntary and respondents completed the surveys during their work time in on-site conference rooms. Participants were mostly female (58.8%), with the majority in the 40-49 (25.1%) or 50-59 (35.9%) age ranges. Their average organizational tenure was 7.4 years (SD = 6.89).

## Analysis and results

To determine the effects of the organizational context variables, SHARP researchers conducted a series of multiple regression analyses predicting each model component from the set of organizational context variables and workplace violence variables. Multiple regression analyses calculate the relationship between different sets of predictor variables and an outcome variable. This relationship is called a multiple correlation; the squared multiple correlation or multiple R squared ( $R^2$ ) indicates the total amount of variance explained in the outcome variable by the set of predictor variables. Multiple regression analyses generate a set of standardized regression weights ( $\beta$ ) that indicate the relative contribution of each predictor to the outcome. Thus, researchers use multiple regression analyses to investigate which predictor variables explain the variance in an outcome. We controlled for individual differences in the analyses to account for the effects of variables that in prior research have been noted as potentially influencing relationships between organizational context factors and work-related outcomes.

In Table 1, we present results for the organizational context for work schedule resources in relation to care provider reports of patient assaults and disruptive behavior. Table 2 presents the results for the organizational context for levels of support in relation to patient assaults and disruptive behavior. Significant relationships are shown in bold in each table with asterisks indicating the level of significance. We organize our discussion by table, discussing the findings for each in turn.

Table 1. The effects of scheduling resources on patient assaults and disruptive behavior.

Organizational Psychosocial Context Resources Step 2 Results	Workplace Violence Outcomes		
	Patient Assaults N=354	Disruptive Behavior N=354	Witnessing Disruptive Behavior N=341
<b>Individual Differences</b>	<b><math>\beta</math></b>	<b><math>\beta</math></b>	<b><math>\beta</math></b>
Education Level	.01	.12*	.10
Position Tenure	.10	-.04	-.05
Shift	-.08	.02	.02
Ward pulls past 6 months	.11*	.04	.09
Staff Position	.04	.05	-.02
Contact with Supervisor	.08	-.10	-.07
<b>Work Schedule Resources</b>	<b><math>\beta</math></b>	<b><math>\beta</math></b>	<b><math>\beta</math></b>
Staffing Adequacy	.03	-.22***	-.14*
Schedule Control	-.07	-.14*	-.14*
Schedule Satisfaction	-.14*	-.11	-.08
<b>Variance explained (<math>R^2</math>)</b>	<b>.07*</b>	<b>.17***</b>	<b>.10***</b>

Note: Multiple linear regressions – 3 analyses are presented for patient assault, disruptive behavior, and witnessing disruptive behavior. Individual difference variables were entered in Step 1. Work schedule variables were entered together in Step 2.  
 $\beta$  = standardized regression weight. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

**Patient assaults, disruptive behavior and witnessing.** When schedule satisfaction is high, care providers report fewer patient assaults. In addition, high staffing adequacy and schedule control perceptions are significantly associated with low disruptive behavior and witnessing disruptive behavior among care providers. The variance explained ( $R^2$ ) in the disruptive behavior and the

witnessing disruptive behavior analyses are 7%, 17% and 10%, respectively, and disruptive behavior and witnessing such behavior are highly significant. Care providers reporting more pulls from their assigned ward to another ward also reported significantly higher incidences of patient assault.

**Patient and staff safety will likely improve when psychiatric healthcare organizations work to increase staffing adequacy, schedule control, and schedule satisfaction for care providers.**

Table 2. The effects of work support resources on patient assaults and disruptive behavior.

Organizational Psychosocial Context Resources Step 2 Results	Workplace Violence Outcomes		
	Patient Assaults N=356	Disruptive Behavior N=356	Witnessing Disruptive Behavior N=339
<b>Individual Differences</b>	<b><math>\beta</math></b>	<b><math>\beta</math></b>	<b><math>\beta</math></b>
Education Level	.01	.09	.09
Position Tenure	.07	-.08	-.07
Shift	-.09	.02	.03
Ward pulls past 6 months	.10	.04	.09
Staff Position	.02	.04	-.02
Contact with Supervisor	-.10	-.01	-.05
<b>Work Support Resources</b>	<b><math>\beta</math></b>	<b><math>\beta</math></b>	<b><math>\beta</math></b>
Violence Prevention Climate	<b>-.16*</b>	<b>-.20**</b>	<b>-.14*</b>
Organizational Support	-.02	-.12	<b>-.18**</b>
Family Supportive Supervisor Behaviors	-.00	<b>-.27***</b>	-.11
Coworker Support	<b>-.11*</b>	<b>-.14**</b>	.07
<b>Variance explained (R<sup>2</sup>)</b>	<b>.08**</b>	<b>.29***</b>	<b>.14***</b>

Note: Multiple linear regressions – 3 analyses are presented for patient assault, disruptive behavior, and witnessing disruptive behavior. Individual difference variables were entered in Step 1. Work support variables were entered together in Step 2.  
 $\beta$  = standardized regression weight. \*p < .05, \*\*p < .01, \*\*\*p < .001.

**Patient assaults, disruptive behavior and witnessing.** When violence prevention climate is high, all three workplace violence outcomes are low. In addition, when family supportive supervisor behaviors are high, disruptive behavior is low and when organizational support is high witnessing disruptive behavior is low. Finally, high levels of coworker support are significantly related to fewer patient assaults and less disruptive behavior among coworkers. Again, the variance explained is highest for disruptive behavior and witnessing at 29% and 14% respectively, while for patient assaults it is 8%.

The varying strengths of these effect sizes (R<sup>2</sup>) indicate that there is a qualitative difference in experiencing patient assaults as compared to disruptive behavior and witnessing such behavior. This may be due to different care provider expectations. Care providers understand that severely mentally ill patients sometimes become assaultive because of their illness and those who work in the mental health field adjust to this stressor over time and are trained to develop skills for intervening with assaultive patients. In addition, patient assaults occur less frequently, whereas disruptive behavior and witnessing such behavior between supervisors and coworkers may occur on a daily basis and be experienced as quite stressful. Care providers don't expect abusive behavior from their colleagues and it can be difficult to defend against.

**Building resources along the lines of increasing a climate for violence prevention, organizational support from upper level management, family supportive supervision, and coworker support is one approach psychiatric settings can take to reduce patient assaults and eliminate disruptive behavior.**

**Care providers with a variety of support mechanisms at work may experience a positive direct effect from the support and recognition, and therefore, experience fewer patient assaults and engage in and witness less disruptive behavior.**

## Conclusions

The unique contribution of the current study is in the findings that suggest when organizational psychosocial context resources are high, the stressors of workplace violence and disruptive behavior and witnessing such behavior are low. This study has provided the empirical evidence necessary to challenge existing paradigms of workplace violence prevention that focus primarily on training and modifying the physical environment, although these are also important to address. These findings suggest that psychiatric healthcare organizations with an interest in care provider well-being and safety could provide interventions that target work redesign and building schedule control and support resources.

The ultimate goal of this study is to advance innovative approaches to developing collaborative, organizational, and systems-oriented interventions aimed at preventing workplace violence and improving direct care provider well-being, health and safety at work. Future research will develop interventions that target building organizational resources such as redesigning staffing and scheduling practices to increase care provider control, training supervisors to implement a strong violence prevention climate for patient and staff safety, and training supervisors on family supportive behaviors to assist employees in successfully managing both domains of work and home.

Contact Nan Yragui at [Nanette.Yragui@Lni.wa.gov](mailto:Nanette.Yragui@Lni.wa.gov) if you have questions about this study.

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