

Disruptive behavior in a high-power distance culture and a three-dimensional framework for curbing it

Sandy Lim • E-Yang Goh • Eugene Tay • Yew Kwan Tong • Deborah Chung • Kamala Devi • Chay Hoon Tan • Inthrani Raja Indran

Background: Disruptive behavior can harm high-quality care and is prevalent in many Western public health systems despite increasing spotlight on it. Comparatively less knowledge about it is available in Asia, a region commonly associated with high-power distance, which may limit its effectiveness in addressing disruptive behavior.

Purpose: The aim of this study was to develop a comprehensive framework for tackling disruptive behavior among health care professionals in a public health system.

Methodology: A nationwide cross-sectional study relying on the Nurse–Physician Relationship Survey was conducted in Singapore. Four hundred eighty-six public health care professionals responded.

Results: Two hundred ninety-eight doctors (95.5%) and 163 nurses (93.7%) had witnessed a form of disruptive behavior. Doctors observed disruptive behavior committed by other doctors and nurses much more frequently than did nurses. Doctors made stronger associations between disruptive behavior and negative employee outcomes and between disruptive behavior and negative patient outcomes. Qualitative analyses of participants' open-ended answers produced a multipronged three-dimensional approach for tackling disruptive behavior: (a) *deterrent* measures, (b) *development* of knowledge and skills, and (c) *demonstration* of organizational commitment through proper norms, empathizing with staff, and structural reforms.

Practice Implications: Disruptive behavior is a multifaceted problem requiring a multipronged approach. Our three-dimensional framework is a comprehensive approach for giving health care professionals the capability, opportunity, and motivation to address disruptive behavior effectively.

Key words: Incivility, interprofessional care, patient safety, professionalism, respect

Poor workplace behaviors that can harm high-quality patient care have attracted increasing interest from health care organizations (Dixon-Woods et al., 2014). In addressing misconduct such as patient safety breaches and unprofessional transgressions, research has placed considerable emphasis on actions that involve clear harm to patients

Sandy Lim, PhD, Associate Professor, Department of Management and Organization, National University of Singapore Business School, Singapore.

E-Yang Goh, BA, PhD Student, Department of Management and Organization, National University of Singapore Business School, Singapore.

Eugene Tay, MSc, PhD, Programme and Research Officer, Victim Care Unit, National University of Singapore, Singapore.

Yew Kwan Tong, PhD, Associate Director, Victim Care Unit, National University of Singapore, Singapore.

Deborah Chung, Medical Student, Department of Pharmacology, National University of Singapore Yong Loo Lin School of Medicine, Singapore.

Kamala Devi, MSc, PhD, Associate Professor, Alice Lee Centre for Nursing Studies, National University of Singapore, Singapore.

Chay Hoon Tan, MMed, PhD, Associate Professor, Department of Pharmacology, National University of Singapore Yong Loo Lin School of Medicine, Singapore.

Inthrani Raja Indran, PhD, Senior Lecturer, Department of Pharmacology, National University of Singapore Yong Loo Lin School of Medicine, Singapore. E-mail: phcir@nus.edu.sg.

This research is supported by grants from Singapore's Ministry of Education (R-317-000-128-115 and R-317-000-147-115). The funding source had no role in the design, execution, analyses, and interpretation of the data or decision to submit the results of this study. For the remaining authors, none were declared.

The authors declare no conflicts of interest.

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in anyway or used commercially without permission from the journal. Copyright © 2021 The Authors. Published by Wolters Kluwer Health, Inc.

DOI: 10.1097/HMR.0000000000000315

(Wallis & Dovey, 2011). In comparison, less attention has been afforded to disruptive behavior (e.g., rudeness, yelling), a class of uncivil conduct where the actual harm to staff or patients is not always obvious and which is less likely to attract the sort of legal and corrective attention typically accorded to more conspicuous and aggressive forms of misconduct, such as safety breaches (Wong & Ginsburg, 2017). The recent media spotlight on sexual harassment and other forms of incivility have resulted in policy statements by the U.K. National Clinical Advisory Service and the American Medical Association, acknowledging disruptive behavior as a threat to patient and provider safety (M. Davies & Dinwoodie, 2015; The Joint Commission, 2016). Thus, understanding the prevalence, attitudes, and challenges in tackling disruptive workplace behavior is important for promoting quality care. In this article, we examine the perceptions of disruptive behavior in an Asian public health system to distill its main contributing factors and propose a practical framework for fostering a more civil workplace environment.

Theory Disruptive Behavior in Health Systems

Disruptive behavior is generally defined as any form of inappropriate conduct, which interferes with or has the potential to interfere with the quality of health care delivery (Rosenstein & O'Daniel, 2008). Disruptive behavior, which includes harassment, a disregard for interprofessional input, blaming or patronizing other

colleagues, making insensitive remarks, and outbursts of anger and frustration, is prevalent in many Western health care systems. One study of 4,530 health care professionals working across 102 United States-based hospitals revealed that more than two thirds of respondents had witnessed a disruptive behavior in physicians (77%) and in nurses (65%; Rosenstein & O'Daniel, 2008). In Germany, some 70% of 790 physicians reported experiencing misconduct, such as harassment and degrading speech (Jenner et al., 2019). Another analysis of archival data from Stanford Hospital and Clinics found that males and procedural specialists (e.g., anesthesia and surgery) were more likely to be perpetrators (Hopkins et al., 2018), suggesting that professionals of different backgrounds may behave and react to incivility differently.

Many researchers have studied the disruptive nature of incivility among employees (Andersson & Pearson, 1999; Lim & Cortina, 2005; Lim et al., 2008), including health care professionals (Fida et al., 2018; Wright & Khatri, 2015), showing that it distracts attention, increases errors, hinders open communication, and reduces organizational performance (Cooper et al., 2017; Oppel et al., 2019). When disruptive behavior goes unsanctioned, it can produce a “toxic” workplace culture that negatively impacts staff morale, employee well-being, team collaboration, communication efforts, and quality of care (Andersson & Pearson, 1999; Lim et al., 2008), all of which can be extremely costly for organizations. For example, a recent survey of 7,409 general surgery residents in America found that individuals exposed to discrimination, abuse, or harassment were about three times more likely to experience burnout or harbor suicidal thoughts than those unexposed to disruptive behavior (Hu et al., 2019). In the United Kingdom, Kline and Lewis (2018) estimated the financial cost of bullying and harassment in the National Health Service at approximately £2.281 billion per annum—a potentially large saving when we consider the prospect of fostering a more respectful work environment.

Addressing Disruptive Behavior

Although extant research has highlighted the endemic and detrimental nature of disruptive behavior in Western health care systems, little is known about how to tackle it effectively. Workplace incivility tends to operate under the radar (Andersson & Pearson, 1999), and simply having formal mechanisms for reporting disruptive behavior will rarely suffice (McKenzie et al., 2019). Ambiguity associated with discerning the perpetrator's true motive and intended target makes it difficult to deter disruptive behavior (Wong & Ginsburg, 2017). Moreover, differences in status and power may bias one's interpretation of (un)acceptable conduct and inflate a fear of retribution from speaking up about it (Dixon-Woods et al., 2018). As such, education alone may not be effective in reducing disruptive behavior. Increasing workload, stress, and a workplace culture that condones disruptive behavior may further reduce employee commitment in stamping out uncivil conduct. In recent times, the growing scale and uncertainty associated with the COVID-19 pandemic has also exposed health care professionals to much unruly behavior, even from the public (Lintern, 2020). Unfortunately, compared to other more direct forms of transgressions (e.g., safety violations), disruptive

behavior is characteristically harder to distinguish, voice, and remedy in practice.

Disruptions in a High-Power Distance Culture

These issues are of special relevance to the Asian context where certain cultural characteristics may exacerbate the prevalence of disruptive behavior. One highly informative piece of research is Hofstede et al.'s (2010) work on culture variability, in which 126 questions were administered to IBM employees across 50 countries and 3 regions to measure national differences in attitudes and norms. The results were factor-analyzed to create five main cultural dimensions (e.g., power distance, individualism, masculinity, uncertainty avoidance, and long-term orientation). The dimension *power distance* measured the degree to which people were comfortable with inequalities in power distribution, with a typical range of scores somewhere between 0 and 100. According to Hofstede and colleagues, Asian cultures had typically high-power distances wherein subordinates tended to accept and expect a subservient relationship with their superior. Asian countries like Singapore, China, and the Philippines scored between 74 and 94 for power distance, whereas Western countries like the United States, Canada, and the United Kingdom scored much lower between 35 and 40 (Hofstede et al., 2010). A high-power distance national culture may therefore disincentivize mutual respect (Kirkman et al., 2009) and create conditions that are ideal for propagating incivility unchallenged throughout organizations. For example, in examining the impact of workplace incivility among various organizations based in Singapore, Lim and Lee (2011) found that employees experienced more incivility from superiors than coworkers or subordinates and that these experiences negatively affected both work and nonwork outcomes.

Moreover, research on multinational corporations has established a strong link between national cultures and organizational cultures showing that societal values have great influence over the shape of local institutional policies and practices (Schneider et al., 2013). To some extent then, organizational norms and behaviors are a reflection of the local cultural landscape, and those that serve to reinforce power differentials in social interactions may promote tension and distrust in the workplace. This applies to many modern health care systems (e.g., United States, United Kingdom, Singapore) seeking to promote quality interprofessional care with doctors and nurses (Tan & Lee, 2019) and, thus, raises three interesting research questions: (a) Is disruptive behavior prevalent in an Asian health care system? (b) Do doctors and nurses experience and perceive disruptive behavior differently? (c) What are the ways for tackling disruptive behavior in health care systems?

To address these questions, we conducted a national survey of disruptive behavior among health care professionals (i.e., doctors and nurses) in Singapore's public hospitals. Healthcare organizations in general tend to be characterized by cultural norms that protect power differentials (e.g., between senior and junior doctors), and this survey is part of a broader campaign to improve workplace culture and medical

professionalism in the health care system. It will contribute knowledge on the perceptions and misperceptions of disruptive behavior in health care professionals, and surface opportunities for designing more effective interventions at promoting high-quality care.

Method Context

Singapore is similar to many developed Western countries in that it is currently confronting a rapidly aging population, a rising prevalence of comorbidities, and a growing impetus on doctors and nurses to provide integrated care (Tan & Lee, 2019). At the same time, Singapore is culturally similar in terms of power distance to many typical Asian countries and even those in Latin America (e.g., Mexico scores 81; Hofstede et al., 2010). Thus, insights gathered from this work may benefit many health care systems worldwide, especially on issues related to intercultural, interprofessional, and interpersonal dynamics. To this end, we performed a nationwide, cross-sectional survey of doctors and nurses in Singapore's public hospitals. We selected these professions for making comparisons to past data gathered in the West and for leveraging on their sizeable workforce to drive meaningful change in hospitals. This study received ethics approval from the National University of Singapore Institutional Review Board.

Participants

The survey was completed by 500 out of 1,218 doctors and nurses. We excluded 14 respondents who were not from public hospitals, resulting in a total of 486 questionnaires for analyses (response rate = 39.9%). Completed questionnaires were returned by 312 (64.2%) doctors and 174 (35.8%) nurses. The sample of doctors was about evenly split in gender (53.5% male doctors vs. 46.5% female doctors) and mainly of Chinese ethnicity (83.3%), with an average age of 31 years. Our sample of nurses was primarily female (5.2% male nurses vs. 94.8% female nurses) and mainly of Chinese ethnicity (64.4%), with an average age of 40 years.

Procedure

Measures. We adapted the original Nurse–Physician Relationship Survey (Rosenstein & O'Daniel, 2008) and customized it to the local context (e.g., changing demographic classifications). A pilot test with 30 doctors resulted in a comprehensive questionnaire covering three main areas: (a) prevalence of disruptive behavior, (b) perceived negative outcomes of disruptive behavior, and (c) the opportunities for addressing disruptive behavior. The survey contained closed-ended questions, primarily in a multiple-choice or 5-point Likert scale format, and some open-ended questions. There were 36 questions in total, and average completion time was about 15 minutes.

To measure prevalence, we asked participants to select from a list of 13 disruptive behaviors (e.g., yelling, outbursts of anger, harassment, making intimidating comments) that they had witnessed being perpetrated by a doctor in the past 1 year. To measure perpetration frequency, we asked

participants to rate how frequently (Likert scale: 1 = *never*, 5 = *daily*) they witnessed disruptive behavior from a doctor. Both these questions were repeated where the nurse was the perpetrator. To assess its perceived detrimental nature, we asked participants to rate the frequency (Likert scale: 1 = *never*, 5 = *constant*) with which they believed disruptive behavior had resulted in a list of 17 negative outcomes. These outcomes were computed as two separate subscales, one measuring 11 employee-related outcomes (e.g., reduced staff morale, frustration, poorer work performance) and another measuring six patient-related outcomes (e.g., miscommunication, errors, patient mortality). The higher the score, the stronger the perceived association between disruptive behavior and a specific detriment to health care systems. The correlation matrix for these variables can be found in Table 1. To develop effective interventions, we asked participants whether there was any well-enforced organizational policy against disruptive behavior. In addition, we posed two open-response questions to participants: (a) “How do you think medical or nursing education can be used as a platform to prepare young doctors and nurses to better handle situations of disruptive behavior in health care?” and (b) “What form of organizational support do you think would better aid in reducing the incidence of disruptive behavior among doctors and nurses?”

Data collection occurred between August 2017 and December 2017. E-mails were sent to all doctors working in a hospital setting and registered with the Singapore Medical Association to invite them to participate in the survey anonymously. We also reached out to public hospitals to send a similar e-mail to all nurses. The e-mail contained information about the study and an e-survey link to the online questionnaire. Given that recipients may not necessarily receive or view their e-mails, data on the number of site entries (the number of people who clicked on the link) to the e-survey link and the number of respondents who completed the survey were collected from the survey platform. For the survey disseminated to doctors only, the e-survey link recorded 767 site entries. For the nurses' survey, the e-survey platform recorded 451 site entries. No personal or hospital-related identifiers were collected in the survey.

Analysis. To analyze quantitative responses, we used descriptive statistics and independent-sample *t* tests to determine the significance of mean differences between doctors and nurses. All statistical tests were set at the 5% significance level and analyzed using SPSS V.24. To analyze qualitative responses, we used two complementary approaches.

Step 1. First, the two open responses were combined to give a single answer for each participant. Two independent coders performed a direct examination of the terms used by participants. The coders proceeded methodically and iteratively, resolving discrepancies by consensus. This first-order analysis resulted in the full agreement of 32 categories, illustrating a host of problems and potential solutions. Next, the coders performed axial coding (Corbin & Strauss, 2008), which enabled the combination of similar themes. This produced eight second-order themes, allowing us to surface key areas for intervention. We then combined these second-order

TABLE 1: Correlation of participant characteristics and outcomes of disruptive behavior

| Variables | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|-------|------|--------|--------|-------|-------|-------|-------|-----|
| 1. Gender (male) ^a | .36 | .48 | — | | | | | | |
| 2. Age | 33.72 | 9.91 | -.16** | — | | | | | |
| 3. Profession (doctor) ^b | .64 | .48 | .48** | -.42** | — | | | | |
| 4. Frequency of witnessing disruptive behavior committed by doctors | 3.00 | 1.06 | .15** | -.26** | .17** | .81 | | | |
| 5. Frequency of witnessing disruptive behavior committed by nurses | 2.91 | 1.16 | .09* | -.30** | .12* | .55** | .80 | | |
| 6. Negative employee outcomes | 3.56 | .72 | .05 | -.28** | .22** | .39** | .35** | .92 | |
| 7. Negative patient outcomes | 2.97 | .82 | .01 | -.22** | .13** | .26** | .29* | .63** | .92 |

Note. Total participants: N = 486. Cronbach's alpha scores appear on the diagonal.
^a0 = female and 1 = male.
^b0 = nurse and 1 = doctor.
 *p < .05. **p < .01.

themes into three “aggregate dimensions” (Gioia et al., 2013): deterrence, development, and demonstration. The final data structure or what we term as the three-dimensional (3D) framework maps the overall progression from raw codes to meaningful themes and offers a holistic approach for tackling disruptive behavior.

Step 2. To establish interprofessional differences, we analyzed the frequency of answers associated with each theme and expressed them as a proportion of the participant’s profession. We conducted independent-sample *t* tests to determine the significance of differences in proportions between doctors and nurses. These analyses revealed unique information about doctors and nurses as two populations, highlighting what they perceived to be useful or challenging in dealing with disruptive behavior. We provided representative quotations to showcase the emergent themes related to our conceptual model.

Results

Prevalence of Disruptive Behavior

Four hundred sixty-one (94.9%) participants witnessed at least one form of disruptive behavior in the preceding 1 year (298 [95.5%] doctors vs. 163 [93.7%] nurses). In the sample of doctors, 291 (93.3%) had observed doctors and 261 (83.7%) had observed nurses committing at least one form of disruptive behavior. In the sample of nurses, 150 (86.2%) had observed doctors and 151 (86.8%) had observed nurses committing at least one form of disruptive behavior. Table 2 breaks down the type of disruptive behavior by the perpetrator involved, doctors and nurses, respectively. Rudeness was the most common form of disruptive behavior across both professions. Within each profession, doctors tended toward more overt forms (e.g., condescending remarks, outbursts, profanities) of disruptive behavior, whereas nurses tended to use a mixture of ways, including less confrontational behaviors like facial expressions (e.g., rolling eyes), being uncooperative, and spreading malicious rumors.

In terms of frequency rate, 167 (34.4%) respondents reported witnessing disruptive behavior being committed by a doctor on a weekly or more frequent basis, and 160 (32.9%) respondents reported witnessing disruptive behavior being committed by a nurse on a weekly or more frequent basis. *T* tests found that doctors (*M* = 3.13) witnessed disruptive behavior being committed by a doctor more frequently than nurses (*M* = 2.76, *p* < .01). Doctors also witnessed disruptive behavior being committed by a nurse (*M* = 3.01) more frequently than nurses (*M* = 2.73, *p* < .05). The results of two linear regressions with perceived frequency of disruptive behavior committed by doctors and by nurses as dependent variables and gender and profession as independent variables showed that profession but not gender emerged as a significant predictor of witnessed disruptive behavior.

Negative Outcomes

In general, respondents believed that disruptive behavior would somewhat frequently result in negative employee outcomes (*M* = 3.56) and negative patient outcomes (*M* = 2.97). According to Table 3, the three most common employee-related consequences of disruptive behavior were a more stressful working environment, reduced staff morale, and more anxiety and fear. The three most common patient-related consequences of disruptive behavior were miscommunication, poorer quality of care, and more medical errors. *T* tests showed that doctors perceived stronger effects of disruptive behavior on negative employee outcomes (doctors *M* = 3.68 vs. nurses *M* = 3.35, *p* < .01) and negative patient outcomes (doctors *M* = 3.04 vs. nurses *M* = 2.83, *p* < .01) than did nurses. Supplementary *t* tests on gender found no significant differences in the perceived effects of disruptive behavior on both negative employee and negative patient outcomes.

Addressing Disruptive Behavior

When asked if there was an existing well-enforced organizational policy against disruptive behavior at their place of work, only 61 (12.6%) respondents said “yes” (8.0% doctors vs.

TABLE 2: Participants who witnessed disruptive behavior committed by doctors and nurses in the previous year

| Disruptive behavior | Disruptive behavior committed by a doctor | | | | Disruptive behavior committed by a nurse | | | |
|---|---|--|--------------------|-------|--|--|--------------------|-------|
| | Total sample (N = 486) | Interprofessional differences in participants | | | Total sample (n = 486) | Interprofessional differences in participants | | |
| | | Doctor (n = 312) | Nurse (n = 174) | p | | Doctor (n = 312) | Nurse (n = 174) | p |
| Rudeness | 72% | 78% | 61% | <.001 | 63% | 67% | 56% | .022 |
| Condescending remarks | 60% | 71% | 41% | <.001 | 33% | 35% | 29% | .157 |
| Facial expression | 52% | 60% | 38% | <.001 | 46% | 60% | 20% | <.001 |
| Outbursts | 51% | 59% | 36% | <.001 | 34% | 24% | 52% | <.001 |
| Intimidating remarks | 39% | 45% | 28% | <.001 | 22% | 23% | 21% | .647 |
| Profanities | 38% | 45% | 26% | <.001 | 15% | 14% | 17% | .339 |
| Noncompliance | 28% | 25% | 32% | .083 | 19% | 21% | 15% | .117 |
| Yelling | 26% | 30% | 18% | .002 | 11% | 15% | 4% | <.001 |
| Uncooperative | 25% | 27% | 21% | .118 | 30% | 38% | 14% | <.001 |
| Jokes about race religion and sexual orientation | 20% | 27% | 6% | <.001 | 10% | 9% | 10% | .712 |
| Rumors | 13% | 17% | 5% | <.001 | 22% | 18% | 29% | .007 |
| Harassment | 10% | 11% | 6% | .045 | 10% | 13% | 6% | .007 |
| Throwing objects | 6% | 6% | 8% | .375 | 10% | 4% | 20% | <.001 |

Note. Proportion of participants who observed a specific disruptive behavior committed by a doctor or a nurse at their workplace in the past 1 year. Significance level, $p < .05$.

20.7% nurses), and the remaining 87.4% answered “unaware” or “no.” This hints that hospitals may have overlooked regulations against disruptive behavior or, if they existed, failed to communicate them effectively to professionals. The qualitative responses provided richer insights on the connections between problems and potential solutions for curbing disruptive behavior. Table 4 describes the three dimensions and eight themes that emerged from our analysis as well as the frequency counts of participants who mentioned them.

Deterrence. Deterrent measures are corrective actions meant to prevent or reduce the occurrence of disruptive behavior. *Feedback mechanisms* was the most frequently mentioned subtheme and more so among doctors than nurses (26% doctors vs. 15% nurses, $p < .01$). Numerous statements about anonymity and reporting channels, or a lack thereof, stress the importance of having a “safe,” convenient system for voicing concerns. Yet, the proximal nature of disruptive behavior raises questions about the ability of reporting platforms to protect the identity of complainants and from potential retaliation. As one participant explained,

The person reporting disruptive behavior can never be truly anonymous, as witnesses to the event will know that this person escalated the incident. What we really need is assurance that there will be no repercussions.

This is hugely impossible as even though there may be no official retaliation, you cannot control the opinion and bias of others toward the victim, perhaps seen as a “troublemaker.”

Another participant claimed that, “If we report such behaviors, we are labeled as Strawberry generation or snowflakes or weak.” Hence, addressing a culture of victim blaming is a key part of making feedback systems effective. A common suggestion by participants was to adopt 360 feedbacks in which all professionals would receive multiple anonymized reports from their work colleagues, thereby circumventing the stigma of being labeled “troublemakers.”

Interventions was the next most mentioned subtheme (14% doctors vs. 11% nurses, $p = .632$). Participants recognized a spectrum of interventions, ranging from punitive measures (e.g., punishments and warnings) to positive reinforcements (e.g., self-improvement courses and rewarding professional conduct). This might reflect the different attitudes and attributions of responsibility participants saw in the misbehaviors of perpetrators. Statements like “Punitive actions on hardcore professionals who do not improve despite verbal warnings” and “Give warning letters. Send them to communications course. Suspend them” indicate the need to take a measured approach toward behavior change.

Finally, there were frequent concerns about *adjudication*, especially among doctors (13% doctors vs. 4% nurses, $p < .01$).

TABLE 3: Perceptions that disruptive behavior leads to negative employee and patient outcomes at participants' workplace

| Negative outcomes | Mean perceptions of association | | | |
|-------------------------------------|---------------------------------|---|--------------------|-------|
| | Total sample (N = 486) | Interprofessional differences in participants | | |
| | | Doctor (n = 312) | Nurse (n = 174) | p |
| Employee-related | 3.56 | 3.68 | 3.35 | <.001 |
| Anxiety and fear | 3.77 | 3.90 | 3.53 | <.001 |
| Depression | 3.09 | 3.19 | 2.92 | <.01 |
| Frustration | 3.82 | 3.96 | 3.57 | <.001 |
| Higher employee turnover | 3.40 | 3.36 | 3.48 | .246 |
| Impaired professional relationships | 3.77 | 3.98 | 3.41 | <.001 |
| Lower job satisfaction | 3.81 | 3.97 | 3.51 | <.001 |
| More stressful working environment | 4.03 | 4.17 | 3.78 | <.001 |
| Reduced communication | 3.70 | 3.84 | 3.44 | <.001 |
| Reduced staff morale | 4.00 | 4.12 | 3.79 | <.001 |
| Poorer work performance | 3.60 | 3.73 | 3.37 | <.001 |
| Thoughts/actions of self-harm | 2.21 | 2.29 | 2.08 | <.05 |
| Patient-related | 2.97 | 3.04 | 2.83 | <.01 |
| Adverse events ^a | 2.68 | 2.84 | 2.39 | <.001 |
| Compromises in safety | 3.03 | 3.05 | 2.98 | .482 |
| Medical errors | 3.15 | 3.21 | 3.04 | .062 |
| Miscommunication | 3.43 | 3.46 | 3.37 | .297 |
| Patient mortality | 2.21 | 2.28 | 2.07 | <.05 |
| Poorer quality of care | 3.32 | 3.43 | 3.11 | <.001 |

Note. Significance level, $p < .05$. Response scale for negative outcomes ranged from 1 (*never*) to 5 (*constant*).

^aRefers to an unintended injury resulting from or contributed to by medical care (including the absence of indicated medical treatment) that requires additional monitoring, treatment, or hospitalization or that results in death.

Most participants wanted a fair system that could adjudicate cases in an objective manner and mete out disciplinary sanctions that were appropriate to the misbehavior in question. Moreover, they wanted greater transparency in the adjudicative process. For example, one participant asked, “If [the] organization actually does anything to investigate or deal with disruptive behavior,” while another proposed that for each report “...an outcome should be made noticeable.” A fair and transparent complaints system communicates a firm organizational stance against disruptive behavior and increases the perceived efficacy of deterrent measures “instead of letting it slide all the time,” according to one participant.

Development. Developing professionals' ability to regulate their own conduct and their response to disruptive behavior is another crucial dimension. The subtheme *knowledge and*

awareness was more commonly mentioned, particularly among nurses (45% doctors vs. 56% nurses, $p < .05$). Our results point to a poor level of knowledge regarding the definition of disruptive behavior, its causes and impact, and the policies against it. This not only corroborates our earlier quantitative findings but also stresses the importance of effective communication in creating a level playing field for all employees. Furthermore, participants believed that more interprofessional work could help doctors and nurses “break up role prejudices” and build “a better understanding on the challenges that they would face together.”

Skills was the other subtheme to emerge and was more frequently cited by nurses (26% doctors vs. 36% nurses, $p < .01$). Participants typically focused on coping, communication, and professionalism, with coping being most common and diverse. For example, some participants proposed strategies (e.g., conflict management, emotion regulation), whereas others tended to vary

TABLE 4: Themes emerging from qualitative analysis

| Dimensions | Themes | Concepts | Frequency of mention (%) | | |
|----------------------------------|---------------------------------|---------------------------------|-----------------------------|------------------|----------|
| | | | Doctors (n = 312) | Nurses (n = 174) | |
| Deterrence | Adjudication** | Procedural fairness | 41 (13%) | 7 (4%) | |
| | | Transparency | | | |
| | | Justice outcomes | | | |
| | Interventions | Punitive measures | 43 (14%) | 20 (11%) | |
| | | Reconciliatory measures | | | |
| | | Character improvement | | | |
| | | Incentivization | | | |
| | Feedback/reporting mechanisms** | Confidentiality | 80 (26%) | 26 (15%) | |
| | | Accessibility and availability | | | |
| | | Fear of reprisal/victim blaming | | | |
| | | Peer evaluation | | | |
| | Development | Knowledge and awareness* | Definitions of (mis)conduct | 141 (45%) | 97 (56%) |
| Causes and impact of incivility | | | | | |
| Interpersonal understanding | | | | | |
| Regulatory framework | | | | | |
| Sharing/learning from experience | | | | | |
| Medical ethics | | | | | |
| Generic education | | | | | |
| Skills** | | Coping strategies | 80 (26%) | 63 (36%) | |
| | | Communication | | | |
| | | Professionalism | | | |
| | | Generic training | | | |
| Demonstration | | Organizational empathy* | Support groups | 53 (17%) | 45 (26%) |
| | | | Listening ear | | |
| | | | Counseling | | |
| | Improve welfare | | | | |
| | Norms | Leadership behaviors | 105 (34%) | 54 (31%) | |
| | | Leadership emphasis | | | |
| | | Professional identity | | | |
| | | Practices and routines | | | |
| | Structural factors*** | Operational workload | 53 (17%) | 10 (6%) | |
| | | Dedicated units | | | |

Note. Significant difference between doctors and nurses.

*p < .05. **p < .01. ***p < .001.

by approach (e.g., role-playing, video simulation). Despite this, focusing only on education to develop knowledge and skills may have limited effectiveness in addressing disruptive behavior.

Demonstration. Demonstration is about showing an organization's commitment to curb disruptive behavior and consisted of three broad subthemes. The subtheme *norms* surfaced most regularly (34% doctors vs. 31% nurses, $p = .378$), with generally four subtypes cultivating workplace civility. The first was leadership behavior or the ways in which leaders espouse values of respect and collegiality through actions for others to follow. As one participant puts it, "It's the culture of the department as cultivated by senior workers." The second was leadership emphasis or a strong, visible, and vocal mandate by senior management that disruptive behavior has no place in their organization. Poor leadership emphasis could generate uncertainty and ambiguity for incivility to propagate. Third, routines that assert or reinforce power differentials in the workplace could serve to breed a toxic culture wherein disruptive behavior becomes a part of medical life. Some examples include "how one is treated as a junior" and being treated as "boss and the rest." The fourth is professional norms or the different roles and responsibilities professionals have in the process of caregiving, which could be a source of conflict in itself. As one participant explained,

This could be due to a subconscious mentality (of both parties) that there is a top-down relationship between doctors–nurses. I think breaking through this mentality needs to be done early during the student years. Otherwise, this could fester and turn into an "us-versus-them" situation.

Other comments on "how entrenched some ideas and expectations are within the medical culture" further reiterated that education might have limited effects on behavior change and that a cultural shift in mindsets is necessary for curbing disruptive behavior.

Organizational empathy was another frequently mentioned subtheme, especially among nurses (17% doctors vs. 26% nurses, $p < .05$). Terms related to "support groups" and "counseling" were highly common, though calls for a more attentive management style and more employee welfare programs were also popular with participants. For example, several participants wanted an open culture in which they could freely share, listen, and accept feedback.

Finally, *structural factors* appeared more commonly in the comments of doctors than nurses (17% doctors vs. 6% nurses, $p < .001$). Many participants mentioned "workload"- or "stress"-related issues as either the sole reason or key contributing factor of disruptive behavior. Besides this, there were a handful of comments on the importance of creating dedicated organizational entities to tackle disruptive behavior, such as a taskforce or an advocacy group.

Discussion

Disruptive behavior is a problem even in an Asian setting. From the results, disruptive behavior appeared to be relatively

prevalent in high-power distance cultures such as Singapore. In assessing the types of disruptive behaviors that were commonly observed among doctors and nurses, we found that doctors tended to be more confrontational whereas nurses were usually more subversive. We attribute this difference to an inherent power imbalance in doctor–nurse relationships, in which doctors—with their medical expertise and appointments—have traditionally held more influence in medicine than nurses (Nickelsen, 2019; Norful et al., 2019). This power disparity can stifle open communication and undermine respect for one another's involvement in the performance of tasks, greatly increasing the risk of disruptive behavior (Lim & Yao, 2021). Such experiences were evident in our qualitative analysis, both in terms of the sentiments expressed by participants as well as in the types of support that were more popular with professionals. To elaborate, doctors generally mentioned more institutional reforms (e.g., adjudication, reporting), whereas nurses focused on more self-regulatory themes (e.g., knowledge, skills). This not only corroborates our view that power influences behavior but also reveals a relationship between professions and specific opportunities for change. More research on the effectiveness of interventions might inform management on a best set of approaches for curbing disruptive behavior.

Expanding the Perspective on Power

Although we contemplated power distance as an intercultural dimension that may affect organizational prevalence of disruptive behavior across national settings, we believe examining how power relations operate at other levels of analysis might prove useful for distilling actionable insights to help reduce disruptive behavior in health care organizations. Specifically, we examine relational power dynamics in relation to professional identity (group level) and power bases (individual level).

Professional identity. Historically, the medical and nursing professions have been constructed around essentialist notions of curing and caregiving, respectively (Svensson, 1996). Medical training is commonly seen as an intentionally difficult phase for preparing would-be doctors to handle the realities of medical life, including leading on medical decisions and procedures; conversely, nursing education is associated with induction into a caring vocation where incumbents win patients over with kindness. Along these professional lines, doctors are seen to embody ideals of leadership, including rationality, expertise, authority, and competitiveness (Carpenter, 1995). Nurses occupy the space of the other: the realm of emotion and intuition (Weaver et al., 2014). Nursing, in fact, sustains and enables the medical profession through vast amounts of direct care, attention to patient needs, and administration—subsumed under the catch-all of caregiving.

Being a doctor is then about "doing dominance" (K. Davies, 2003) to manifest the ideals of stereotypical leaders. Arguably, disruptive behavior could be overlooked or excused by the organization when cloaked in the guise of rationality, expediency, and impersonality (e.g., I am yelling at you to get it done

now). Hence, when altering routines (under “demonstration” in the 3D framework), one must delve deeper into cultural assumptions (Schein, 1984) that reproduce patterns of professional power and disruptive behavior. An interesting example of the hospital morning round is described by K. Davies (2003). The typical morning round features a long train of individuals trooping into the ward in distinctly hierarchical formation, with senior consultants at the front tailing back to the lowest person on the totem pole. Such displays of rank and order may emphasize professional stereotypes and, over time, normalize disruptive behavior as an inherent part of life in health care organizations.

Power bases. In this article, we discussed how levels of power distance may differ across countries. However, power distance may also vary between organizations and within an organization. According to French and Raven (1959), power is relative in relationships — it depends on the specific understandings each actor has about their involvement and requires one party to acknowledge a qualitative disadvantage, wherein a less powerful actor is inclined to behave in the way a more powerful actor intends. French and Raven's (1959) seminal work on power plays uncovered five bases of power (i.e., coercive, reward, legitimate, referent, and expert), in which an actor may draw on one or more to influence a given relationship. This suggests that the concept of power may be subjective, in that *who* is involved in the interaction matters, as well as dynamic, because actors may combine one or more power bases to alter their power status. These findings explain why disruptive behavior may vary within the same health profession (Fida et al., 2018) and organization (Wright & Khatri, 2015) or across geographic spaces within the same country (Cooper et al., 2019). That said, the degree to which power is dependent or independent of structural factors, like environmental stressors (e.g., prolonged pandemic), legislations, and national culture (Hopkins et al., 2018; McKenzie et al., 2019), could affect the effectiveness of any proposed intervention. It is thus crucial to take both a behavioral and systems approach to addressing disruptive behavior, a quality stressed in the current 3D framework. We explain more about its careful implementation in the following section.

Practice Implications

Addressing power inequity in organizations is at the heart of the 3D framework. The three dimensions work complementarily and sequentially in the order of deterrence, development, and demonstration. First, a clear deterrent structure is necessary for communicating an organization's firm and fair stance in dealing with toxic behaviors, regardless of one's position or authority (Dixon-Woods et al., 2014, 2018). It legitimizes an individual's right to a safe and respectful workplace environment and also creates the channels necessary for reporting disruptive behavior. Development then focuses on empowering individuals with knowledge and skills to communicate or voice concerns more effectively. With the first two in place, organizational leaders can now encourage a cultural shift in mindset where mutual respect is the norm, rather

than exception. We note that clear leadership on the matter, demonstrated by exemplary behavior in top management and an open letter from the most senior executive to each member of staff, might facilitate organizational change.

The causes of disruptive behavior are usually multifactorial, arising from workload, stress, work culture, personality issues, or a combination of these (McKenzie et al., 2019; Pattani et al., 2018). A blanket sanction on all disruptive behavior without regard for situation or severity of impact might create an uncompassionate organization. Hence, we propose a tiered approach in which complaints of disruptive behavior are managed in a way that is objective, respectful and fair for everyone. For instance, initial minor complaints could be managed with a ‘coffee chat’ to make the individuals more aware of their behavior. Professionalism courses, counseling, and workload adjustments should be made available to such staff as required, with management imposing harsher sanctions on recalcitrant offenders. On the other hand, positive reinforcements (e.g., commendation letters and awards) might also be useful in promoting respect in the workplace.

One way to address the issue of professional power and disruptive behavior is to create an interstice within the dominant power regime, where alternative norms might propagate and be reproduced. K. Davies' (2003) observation of a very different kind of morning round in a surgical ward offers some insights. Doctors seated themselves round a table, together with ward nurses, in a conference room. As each patient record was reviewed, it was the patient's nurse who initiated the discussion by presenting their latest summary and appraisal of their charge. Reportedly, nurses felt that this reformat of the morning round enshrined their patient advocacy role, which they deemed elemental to their profession. The challenge then, at least for addressing disruptive behavior, is to build a conscious organization that actively develops and emplaces routines that better respect the input of each professional.

To address organizational biases that propagate disruptive behavior, training and education curriculum will need to help employees understand their own personal or group stereotypes, honor others' viewpoint, and acknowledge the social ramifications of their own behavior. Subordinates, because they are complicit in reinforcing extant power structures (Diamond & Allcorn, 2004), may be empowered to credit their own professional worth and taught skills to assert themselves respectfully. Although personal development might be useful for correcting biased beliefs and perceptions, we suspect that national cultures high in power distance might ultimately limit the overall effectiveness of this dimension in curbing disruptive behavior. Asian cultures, for example, are quite patriarchal, and emphasis on the individual alone might not reduce disruptive behavior if the social context accepts rules and norms that protect power differentials between professionals (Bond & Smith, 1996; Hofstede et al., 2010). In such cases, we stress the complementary nature of having effective deterrent measures and demonstrating organizational commitment in fostering a respectful environment. National cultures are influential, but not entirely deterministic of organizational policies and practices (Schneider et al., 2013).

Limitations

The use of an invited sample may introduce a self-selection bias in our responses wherein those whom are most interested in disruptive behavior are more likely to complete the survey. In addition, we note that there may be situations when a single incident of disruptive behavior might be observed and reported by a group of respondents, leading to biased estimate of prevalence. Another common limitation of surveys relates to the potential for self-reported biases. This includes recall in which participants misjudge their experience(s) of disruptive behavior that happened over the past year and social desirability wherein participants underreport less socially acceptable behaviors. We minimized these biases by providing respondents with assurances of anonymity and confidentiality and by employing a mixture of question formats to cover multiple aspects. Our analyses of closed- and open-ended responses revealed a consistent story throughout, indicating that self-reported bias was not a major issue.

Concluding Thoughts

Disruptive behavior compromises high-quality care. In this study, we contributed knowledge on its multifaceted nature by drawing insights from an Asian setting. We highlighted interprofessional differences in how hospital staff enact and experience disruptive behavior in practice, a phenomenon we attributed to a power differential between doctors and nurses. Through a thorough analysis of professionals' responses, we advanced a structured suite of interventions for curbing disruptive behavior. This multipronged 3D framework gives professionals a clear, common, and level playing field in which professionalism and respect are core values and, should such norms be violated, gives people the capability, opportunity, and motivation to address disruptive behavior.

Acknowledgments

We thank Alan Rosenstein for his support and guidance in designing this study and for sharing the Nurse–Physician Relationship Survey questionnaire with us. We are grateful to Mavian Tay and Jasmine Ting for their helpful suggestions.

References

Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review*, 24(3), 452–471.

Bond, R., & Smith, P. B. (1996). Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) line judgment task. *Psychological Bulletin*, 119(1), 111–137.

Carpenter, J. (1995). Doctors and nurses: Stereotypes and stereotype change in interprofessional education. *Journal of Interprofessional Care*, 9(2), 151–161.

Cooper, W. O., Guillaumondegui, O., Hines, O. J., Hultman, C. S., Kelz, R. R., Shen, P., Spain, D. A., Sweeney, J. F., Moore, I. N., Hopkins, J., Horowitz, I. R., Howerton, R. M., Meredith, J. W., Spell, N. O., Sullivan, P., Domenico, H. J., Pichert, J. W., Catron, T. F., Webb, L. E., ... Hickson, G. B. (2017). Use of unsolicited patient observations to identify surgeons with increased risk for postoperative complications. *JAMA Surgery*, 152(6), 522–529.

Cooper, W. O., Spain, D. A., Guillaumondegui, O., Kelz, R. R., Domenico, H. J., Hopkins, J., Sullivan, P., Moore, I. N., Pichert, J. W., Catron, T. F., Webb, L. E., Dmochowski, R. R., & Hickson, G. B. (2019). Association of coworker reports about unprofessional behavior by surgeons with surgical complications in their patients. *JAMA Surgery*, 154(9), 828–834.

Corbin, J., & Strauss, A. (2008). *Basics of qualitative research (3rd ed.): Techniques and procedures for developing grounded theory*. SAGE.

Davies, K. (2003). The body and doing gender: The relations between doctors and nurses in hospital work. *Sociology of Health and Illness*, 25(7), 720–742.

Davies, M., & Dinwoodie, M. (2015). The disruptive doctor. *BMJ*, 351, h3553.

Diamond, M., & Allcorn, S. (2004). Moral violence in organizations: Hierarchical dominance and the absence of potential space. *Organisational and Social Dynamics*, 4(1), 22–45.

Dixon-Woods, M., Baker, R., Charles, K., Dawson, J., Jerzembek, G., Martin, G., McCarthy, I., McKee, L., Minion, J., Ozieranski, P., Willars, J., Wilkie, P., & West, M. (2014). Culture and behaviour in the English National Health Service: Overview of lessons from a large multimethod study. *BMJ Quality and Safety*, 23(2), 106–115.

Dixon-Woods, M., Campbell, A., Martin, G., Willars, J., Tarrant, C., Aveling, E. L., Sutcliffe, K., Clements, J., Carlstrom, M., & Pronovost, P. (2018). Improving employee voice about Transgressive or disruptive behavior: A case study. *Academic Medicine*, 94(4), 579–585.

Fida, R., Laschinger, H. K. S., & Leiter, M. P. (2018). The protective role of self-efficacy against workplace incivility and burnout in nursing: A time-lagged study. *Health Care Management Review*, 43(1), 21–29.

French, J. Jr., & Raven, R. P. B. (1959). The bases of social power. In Cartwright, D. (Ed.), *Studies in social power*. University of Michigan.

Gioia, D. A., Corley, K. G., & Hamilton, A. L. (2013). Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational Research Methods*, 16(1), 15–31.

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind (3rd ed.)*. McGraw-Hill Education.

Hopkins, J., Hedlin, H., Weinacker, A., & Desai, M. (2018). Patterns of disrespectful physician behavior at an academic medical center: Implications for training, prevention, and remediation. *Academic Medicine*, 93(11), 1679–1685.

Hu, Y.-Y., Ellis, R. J., Hewitt, D. B., Yang, A. D., Cheung, E. O., Moskowitz, J. T., Potts, J. R. 3rd, Buyske, J., Hoyt, D. B., Nasca, T. J., & Bilimoria, K. Y. (2019). Discrimination, abuse, harassment, and burnout in surgical residency training. *New England Journal of Medicine*, 381(18), 1741–1752.

Jenner, S., Djeremester, P., Prügl, J., Kurmeyer, C., & Oertelt-Prigione, S. (2019). Prevalence of sexual harassment in academic medicine. *JAMA Internal Medicine*, 179(1), 108–111.

Kirkman, B., Chen, G., Farh, J. L., Chen, Z. X., & Lowe, K. (2009). Individual power distance orientation and follower reactions to transformational leaders: A cross-level, cross-cultural examination. *Academy of Management Journal*, 52(4), 744–764.

Kline, R., & Lewis, D. (2018). *The price of fear: Estimating the financial cost of bullying and harassment to the NHS in England* (pp. 1–10). Public Money & Management, October.

Lim, S., & Cortina, L. M. (2005). Interpersonal mistreatment in the workplace: The Interface and impact of general incivility and sexual harassment. *Journal of Applied Psychology*, 90(3), 483–496.

Lim, S., Cortina, L. M., & Magley, V. J. (2008). Personal and workgroup incivility: Impact on work and health outcomes. *Journal of Applied Psychology*, 93(1), 95–107.

Lim, S., & Lee, A. (2011). Work and nonwork outcomes of workplace incivility: Does family support help? *Journal of Occupational Health Psychology*, 16(1), 95–111.

Lim, S., & Yao, J. (2021). The role of leaders in shaping a civil and respectful workplace. In De Cremer, D. (Ed.), *Asian global leadership*. De Gruyter.

Lintem, S. (2020). Nurses treating coronavirus spat at and called 'disease spreaders.' Retrieved April 4, 2020, from <https://www.independent.co.uk/news/health/nurses-coronavirus-nhs-spitting-rcn-covid-19-a9414416.html>

McKenzie, L., Shaw, L., Jordan, J. E., Alexander, M., O'Brien, M., Singer, S. J., & Manias, E. (2019). Factors influencing the implementation of a hospital-wide intervention to promote professionalism and build a safety culture: A qualitative study. *The Joint Commission Journal on Quality and Patient Safety*, 45(10), 694–705.

Nickelsen, N. C. M. (2019). The infrastructure of telecare: Implications for nursing tasks and the nurse–doctor relationship. *Sociology of Health and Illness*, 41(1), 67–80.

Norful, A. A., Swords, K., Marichal, M., Cho, H., & Poghosyan, L. (2019). Nurse practitioner–physician comanagement of primary care patients:

- The promise of a new delivery care model to improve quality of care. *Health Care Management Review*, 44(3), 235–245.
- Oppel, E.-M., Mohr, D. C., & Benzer, J. K. (2019). Let's be civil: Elaborating the link between civility climate and hospital performance. *Health Care Management Review*, 44(3), 196–205.
- Pattani, R., Ginsburg, S., Mascarenhas Johnson, A., Moore, J. E., Jassemi, S., & Straus, S. E. (2018). Organizational factors contributing to incivility at an academic medical center and systems-based solutions: A qualitative study. *Academic Medicine*, 93(10), 1569–1575.
- Rosenstein, A. H., & O'Daniel, M. (2008). A survey of the impact of disruptive behaviors and communication defects on patient safety. *Joint Commission Journal on Quality and Patient Safety*, 34(8), 464–471.
- Schein, E. H. (1984). Coming to a new awareness of organizational culture. *Sloan Management Review*, 25(2), 3–16.
- Schneider, B., Ehrhart, M. G., & MacEy, W. H. (2013). Organizational climate and culture. *Annual Review of Psychology*, 64, 361–388.
- Svensson, R. (1996). The interplay between doctors and nurses—A negotiated order perspective. *Sociology of Health and Illness*, 18(3), 379–398.
- Tan, K. B., & Eam Lee, C. (2019). Integration of primary care with hospital services for sustainable universal health coverage in Singapore. *Health Systems & Reform*, 5(1), 18–23.
- The Joint Commission (2016). Bullying has no place in health care. *Quick Safety*, (24), 1–4.
- Wallis, K., & Dovey, S. (2011). No-fault compensation for treatment injury in New Zealand: Identifying threats to patient safety in primary care. *BMJ Quality and Safety*, 20(7), 587–591.
- Weaver, R., Ferguson, C., Wilbourn, M., & Salamonson, Y. (2014). Men in nursing on television: Exposing and reinforcing stereotypes. *Journal of Advanced Nursing*, 70(4), 833–842.
- Wong, B. M., & Ginsburg, S. (2017). Speaking up against unsafe unprofessional behaviours: The difficulty in knowing when and how. *BMJ Quality and Safety*, 26(11), 859–862.
- Wright, W., & Khatri, N. (2015). Bullying among nursing staff: Relationship with psychological/behavioral responses of nurses and medical errors. *Health Care Management Review*, 40(2), 139–147.