

**Unprofessional Behavior Experiences and Barriers to Medication Error Reporting Predict Safety Climate in Hospital Nurses**

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**Purpose:** Positive nursing work environments and nurse satisfaction are associated with better patient outcomes (Aiken et al., 2011; Aiken, Clarke, Sloane, Lake, & Cheney, 2008). Improving the nursing work environment can decrease failure to rescue and patient mortality. Thus, factors that reflect a more positive work environment (e.g., lower levels of unprofessional behavior, perceptions of a better safety climate) should reflect greater patient safety. As part of a workforce engagement initiative at a faith-based Magnet™ community hospital in the southwestern United States, this correlational study aimed to determine whether unprofessional behavior experiences and barriers to medication error reporting predict safety climate in hospital nurses.

**Methods:** In late spring 2017, participation invitations went out to ~1000 nurses on an all-registered nurse electronic mail nursing-service list; eligible nurses were employed at the hospital for 3+ months. Besides demographics, survey measures included the 7-item Safety Attitudes Questionnaire (SAQ) Safety Climate subscale (Sexton et al., 2006), three subscales from the Johns Hopkins Disruptive Clinician Behavior Survey© (JH\_DCBS; Dang et al., 2015), and the 20-item Barriers to Medication Error Reporting scale (Handler et al., 2007). Each measure had initial evidence of validity and reliability; each also proved reliable (good-excellent internal consistency coefficients) in this study. To answer the research question, a hierarchical multiple regression was done (Safety Climate scores - dependent variable) using the following blocks: (1) Nurse role, (2) Unprofessional Behavior Experiences (Exposure, Impact on Nurse, Patient Impact), and (3) Barriers to Medication Error Reporting (BMER) scores.

**Results:** All three blocks (nurse role, unprofessional behavior experiences, and BMER) contributed significantly to the model ( $N = 320$ ), which explained 35% of variation in safety climate perceptions ( $p < .0001$ ). Nurse role predicted a small but significant amount of the variance in safety climate perceptions ( $R^2 = .06$ ) with non-staff nurses having higher scores on safety climate. The three variables making up the "experience of unprofessional behavior" block accounted for almost half of the explained variance ( $R^2 = .16$ ) with only exposure significantly negatively related to safety climate perceptions; that is, nurses with more exposure to unprofessional behavior had significantly lower safety climate scores. BMER scores predicted almost half of the variance ( $R^2 = .14$ ) with higher barriers contributing significantly to lower perceptions of safety climate.

**Conclusion:** Study findings support unprofessional behaviors and BMER as being negatively associated with perceived safety climate among hospital nurses. This is congruent with findings from non-hospital settings where strong organizational safety culture as measured by workplace safety climate enhances accident reporting by employees (Probst, 2015). When underreporting occurs, possibly due to the voluntary nature of reporting (Patrician & Brosch, 2009), this can compromise patient safety by disabling hospital performance improvement efforts. Our study findings are also related to conclusions from a review of studies evaluating disruptive behaviors between nurses and physicians in North America settings (Saxton, Hines, & Enriquez, 2009): such behaviors were linked to reports of increased patient errors and trouble concentrating on task at hand and engaging in critical thinking.



Study findings indicate that nurse perceived safety climate can be impacted negatively by exposure to unprofessional behaviors and BMER. To enhance patient safety, organizations may consider that appropriate programs targeted at increasing civility and decreasing MBER may be needed.

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**Title:**

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**Keywords:**

barriers to medication error reporting, safety climate and unprofessional behaviors

**References:**

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**Abstract Summary:**

A correlational study found that unprofessional behavior experiences and barriers to medication error reporting predicted safety climate among nurses from a faith-based community hospital with Magnet designation. Study findings indicate that nurse perceived safety climate can be impacted negatively by exposure to unprofessional behaviors and barriers to medication error reporting.

**Content Outline:**



## 1. Problem Area

- a. Safety Climate
- b. Unprofessional Behaviors
- c. Barriers to Medication Error Reporting

## 2. Study Methods

- a. Design – Correlational survey study done in 2017
- b. Sample/setting – 380 nurses from a faith-based community hospital with Magnet accreditation
- c. Study Measures with Psychometrics
  - i. Demographics
  - ii. 7-item Safety Attitudes Questionnaire (SAQ) Safety Climate subscale(Sexton et al., 2006)
  - iii. 3 subscales from the Johns Hopkins Disruptive Clinician Behavior Survey© (JH\_DCBS; Dang et al., 2015)
  - iv. 20-item Barriers to Medication Error Reporting scale (Handler et al., 2007).
- d. Data Analysis
  - i. Descriptive/correlational Statistics
  - ii. Hierarchical multiple regression (Safety Climate scores - dependent variable) using blocks: (1) Nurse role, (2) Unprofessional Behavior Experiences (Exposure, Impact on Nurse, Patient Impact), (3) Barriers to Medication Error Reporting (BMER) scores.

## 3. Results

- a. Experiences with unprofessional behavior and barriers to medication error reporting explained 35% of variation ( $p < .0001$ ) in safety climate perceptions
- b. Safety climate perceptions were higher among nurses not in staff nurse positions, those exposed to fewer and less frequent unprofessional behaviors, and those perceiving lower barriers to medication error reporting

## 4. Discussion

- a. Tie with prior work
- b. Implications for practice and further studies

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**Professional Experience:** Currently, Professor Emeritus, California State University Fullerton with primary responsibilities in the Southern CA CSU DNP Consortium. Also, serve as nursing research consultant, St. Joseph Hospital, Orange CA. Between 1992 and now, multiple national and regional consultations and regional, national, and international presentations related to implementing research-based practice changes. Multiple peer-reviewed papers and book chapters related to implementing research-based practice changes and EBP. Served as Director of Research, Fibromyalgia and Chronic Pain Center, California State University, Fullerton from 2007-2015.

**Author Summary:** Dr. Rutledge is experienced in designing and facilitating research/evidence-based projects on various topics and has authored/co-authored >70 publications in peer-reviewed journals. One of her strengths is being able to assist others to design research studies, and to document implementation and evaluation of clinical projects. In her current work with Doctor of Nursing Practice students at the Southern California CSU DNP Consortium, Dr. Rutledge promotes use of systematic approaches to making practice changes.

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