Behaviors that undermine a culture of safety pose a serious threat to the overall wellbeing of healthcare workers as well as to patient outcomes. Despite zero tolerance policies related to negative behaviors among healthcare professionals by the American Medical Association, American Nurses Association and the Joint Commission, incivility and other disruptive negative behavior persist. Published studies have focused on identifying prevalence of these behaviors within single disciplines such as nursing or physicians while limited evidence exists for interprofessional teams. This study is innovative, as it will establish the existence of a relationship between the prevalence of negative behaviors and the relationship of these behaviors to perceptions of hospital safety culture and publicly reported AHRQ patient safety outcomes related to mortality.

Understanding these relationships provides novel insights for healthcare leaders and researchers, guiding future studies exploring development and testing of potential interventions. These potential interventions may mitigate negative behaviors that undermine a culture of safety, improve perceptions of safety culture and/or improve outcomes for AHRQ publicly reported outcomes. A descriptive correlational cross-sectional design will be used to evaluate relationships between disruptive behaviors displayed by healthcare professionals across a healthcare system and hospital performance on Agency for Healthcare Research and Quality (AHRQ) Patient Safety Indicators (PSI) related to mortality. Comparisons will be made across a healthcare system regarding self-reported perceptions of hospital staff on composite scores of the AHRQ Survey on Hospital Patient Safety Culture.

There are five specific innovations within this study. First, the study setting is in an academic health system that includes eight hospitals in the United States. A large portion of existing work within the field has occurred outside of the United States, thus adding to the innovation of the proposed study setting. A secondary innovation for this study includes the diverse sample of proposed participants. In lieu of a homogenous sample within a single discipline, this study aims to include a diverse sample of healthcare workers, as many of the published studies measuring negative behaviors include only a single discipline. Third, the Negative Behaviors in Healthcare Survey (NBHC) instrument is an innovative instrument designed to measure negative behaviors among the interprofessional team. The NBHC instrument evolved from a valid and reliable instrument the Lateral Violence in Nursing Survey (LVNS) Cronbach’s alpha of 0.74 LV by self and 0.86 for LV from others (3). To date, only two instruments have measured negative behaviors among interprofessional healthcare teams (4, 5). Moreover, majority of existing instruments measure negative behaviors designed for nurses (3, 6-18).

The NBHC measures negative behaviors using five sub scales identified through confirmatory factor analysis. These subscales include contributing factors, experiences with aggression, fear of retaliation, seriousness and use of negative behaviors. To date, no available studies have examined the fear of retaliation or the seriousness of negative behaviors. This instrument was developed to capture the negative behavior experiences of the interprofessional team in healthcare settings. Through measurement of the frequency, magnitude, and source of negative behaviors interventions can be designed and tested to improve relationships among the interprofessional team which is an existing gap. The fourth innovation includes the specific aim to understand the relationship between negative behaviors among healthcare workers and mortality outcomes measured by AHRQ PSIs. While evidence exists to support that negative behaviors increase the risk for poor patient outcomes, a link to AHRQ PSIs has yet to be published. Finally, Healthy People 2020 lists social and community context as one of five social
determinants of health (19). The fifth innovation is the evaluation of specific aspects of a culture of safety within a healthcare system in the context of negative behaviors. Results from this study could inform additional research aimed at understanding the relationship between social determinants of health for healthcare workers and negative behaviors.

Understanding the prevalence of negative behaviors among members of the interprofessional team within hospitals is the critical first step in the development and testing of interventions to improve patient outcomes as well as employee engagement and experience. While existing instruments and studies address components of these issues, few studies have documented interprofessional prevalence of negative behaviors, and none to date have provided data related to the relationship of these behaviors to a culture of safety within hospitals. Understanding whether and how these concepts are related will aid healthcare leaders and researchers to develop and test improved interventions for patient and employee safety.

Title:
Influence of Negative Behaviors on Patient Safety Culture and Mortality Within Acute Care

Keywords:
disruptive behavior, incivility and workplace violence

References:

Abstract Summary:
The primary aim of this study is the measurement of disruptive behavior among the interprofessional healthcare team and understanding how these behaviors influence patient safety culture and patient outcomes measured by AHRQ PSI related to mortality.

Content Outline:
Background: The American Nurses Association (ANA), and the American College of Healthcare Executives (ACHE) recognize the harmful consequences of these behaviors for patients and healthcare workers, and have endorsed zero tolerance policies (1). These changes in policy have prompted The Joint Commission to require that organizations have a code of conduct defining disruptive behaviors and defined processes for managing these behaviors due to the negative impact on patient safety and quality (2).

Specific Aims: This study will: 1) evaluate the presence of disruptive behavior across a healthcare system, a) using the recently validated Negative Behaviors in Healthcare Survey (NBHC), and b) examine the relationship between negative behaviors and hospital performance on two mortality AHRQ Patient Safety Indicators 2) compare the presence of negative behaviors across a healthcare system measured using the NBHC survey with self-reported perceptions of hospital staff utilizing specific composites of AHRQ Hospital Survey on Patient Safety Culture.

Methods: This study uses a descriptive correlational cross-sectional study design to measure primary and secondary outcomes. Participant recruitment includes a rural NC healthcare system serving a 29 county area covering 1.4 million people in Eastern North Carolina.

Results: Univariate descriptive statistics and frequency distributions for the total sample, and interprofessional groups will characterize the sample. Aim 1 descriptive statistics for hospital system performance on the specifically included AHRQ PSI measures and the system wide values for each of the five NBHC sub scales will be provided. Spearman's correlations between each of the five NBHC subscales (Contributing Factors, Experiences in Negative Behaviors, Seriousness of Negative Behaviors, Use of Aggression, Fear of Retaliation and each of the seven included SOPS composites will address Aim 2.. The NBHC and SOPS overall data for each participating study site will undergo a multiple linear regression analysis. Dependent variables include the included composite scores from the SOPS instrument, independent variables include the five subscales from the NBHC, and potential covariates include hospital type (academic vs community), unit type, field position, and years of experience.

Limitations: This analysis is limited to one North Carolina academic healthcare system which potentially limits generalizability due to the unique context of the system; and relies on hospital administrative data for the AHRQ PSI data which may or may not be complete or fully accurate based on integrity of the documentation and coding practices within the sample healthcare system. Identified and reported following data collection and analysis Potential study limitations include nonresponse and self-selection.
biases as well as sampling error because the sample population may not be representative of all health care workers.

**Significance:** Understanding the prevalence of negative behaviors among members of the interprofessional team within hospitals is the critical first step in the development and testing of interventions to improve patient outcomes as well as employee engagement and experience. While existing instruments and studies address components of these issues, few studies have documented interprofessional prevalence of negative behaviors, and none to date have provided data related to the relationship of these behaviors to a culture of safety within hospitals. Understanding whether and how these concepts are related will aid healthcare leaders and researchers to develop and test improved interventions for patient and employee safety.

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**Author Summary:** As a certified quality healthcare professional, I have managed comparative databases for a large academic medical center for several years, in addition to certifying as a Lean Six Sigma Black Belt. My research interests involve understanding the presence of negative behaviors among the interprofessional team and the influence of these behaviors on patient safety culture and patient outcomes.

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