NCPD 2.5 ANCC Contact Hours

# National Study of Quality, Safety, and Just Culture in Prelicensure Nursing Education

Gerry Altmiller


## Abstract

**AIM** The study's aim was to evaluate the integration and application of quality and safety competencies and concepts of fair and just culture in prelicensure nursing education.

**BACKGROUND** Health care organizations support a safety culture by encouraging error reporting without fear of punishment and by conducting investigations to determine causes to improve quality and learn from mistakes. In prelicensure nursing education, the response to errors is often punitive and threatens dismissal.

**METHOD** Members of the National Student Nurses' Association were recruited to participate in an electronic assessment through the organization's mailing system.

**RESULTS** Students representing all prelicensure program types (BSN, ADN, diploma, accelerated) and 46 states ($N = 268$) completed the survey.

**CONCLUSION** Nurse educators were found to have a positive impact on student quality and safety competency. Improvement is possible in developing and supporting just culture within nursing programs to bridge the gap between academia and practice.


**KEY WORDS** Error Reporting – Just Culture – Nursing Education – Nursing Students

At the beginning of the patient safety movement that followed the publication of *To Err Is Human* (Institute of Medicine, 2000), practice moved to supporting safety culture, most recently defined by The Joint Commission (2017) as a culture composed of a just culture, a reporting culture, and a learning culture. Although health care organizations have continued to encourage error reporting without fear of punishment, the same is not true of academia where errors are rarely tolerated and frequently result in punishment or expulsion from the education program (Jones et al., 2021). Quality and safety of health care are dependent on fair and just culture principles as a mechanism to identify risks and correct them (Edwards, 2018), making it essential to understand how just culture principles are understood in academic settings for registered nurse preparation (Barnsteiner & Disch, 2017; Disch et al., 2017).

## BACKGROUND

Patient safety efforts in practice have focused on creating a fair and just culture, where errors can be identified and reported and where system remedies are created. The goal of such efforts is to prevent reoccurrence and improve the quality and safety of care without punishment to the involved individual. The same is not true of nursing education, where student experiences with error and the sequelae that follow focus on individual performance and frequently take a punitive approach with the threat of a warning or even dismissal from the program (Disch et al., 2017; Jones et al., 2021; Usher et al., 2017). The disciplinary response to errors in academia reinforces a shame and blame culture, an approach that thwarts prevention strategies from being implemented, deters students from identifying and reporting risk-prone behaviors and situations, and impedes students learning from mistakes (Asensi-Vicente et al., 2018; Disch et al., 2017).

Quality and safety within the health care system rely on principles of justice and fairness to those who report errors. The focus of a fair and just culture is on conducting a thorough review of all factors in a situation to support the identification and improvement of system issues that may lead to error while maintaining accountability for individual practice (Agency for Healthcare Research and Quality [AHRQ], 2019). In a fair and just culture, it is recognized that risk is present in health care and that humans make mistakes (Barnsteiner & Disch, 2017). There is an understanding that the threat of disciplinary action cannot and does not prevent individuals from making errors. Rather, such threats affect the *reporting* of errors. The literature supports that a fair and just culture in the workplace reduces errors and increases safety reporting by encouraging the identification of high-risk behaviors and manageable errors (Eng & Schweikard, 2020; Marx, 2001; Penn, 2014; Petschonek et al., 2013).

In 2010, the American Nurses Association issued a position paper supporting the concept of just culture to improve patient safety. The position paper describes how just culture provides opportunities for staff nurses and students to participate in system improvement and feel more at ease in reporting problems or errors. It recommends that academia adopt a just culture in response to errors that involve nursing students so that root causes can be identified, future errors can be prevented, and quality and safety of care can be enhanced. However, a plethora of studies continue to report nursing students' fear of blame and repercussion for reporting errors (Christensen,

**About the Author** *Gerry Altmiller, EdD, APRN, ACNS-BC, ANEF, FAAN, is a professor and director of the Quality and Safety Innovation Center, The College of New Jersey Department of Nursing, Ewing, New Jersey.*

*This research was funded by a Dorothy Otto National League for Nursing Research in Nursing Education Grant. For more information, contact Dr. Altmiller at Altmillg@tcnj.edu.*

*The author has declared no conflict of interest.*

Copyright © 2023 National League for Nursing

doi: 10.1097/01.NEP.0000000000001164



Copyright © 2023 National League for Nursing. Unauthorized reproduction of this article is prohibited.

2018; Cooper, 2017; Fagan et al., 2016; Gorini et al., 2012; Halperin & Bronshtein, 2019; Usher et al., 2017) and that the reporting of errors among nursing students is low (Asensi-Vicente et al., 2018; Dehvan et al., 2021). Nursing students often feel they cannot speak if they see something that might negatively impact the patient (Cooper, 2017). Usher et al.'s (2017) work confirmed the fear of speaking up, specifically related to fear of disciplinary action for errors. Their findings indicated that student progression through the curriculum negatively affected confidence and the likelihood that students would question the decisions and actions of those in authority, impeding quality and safety efforts.

The literature indicates students are less likely to report an error after having previously received feedback from faculty (Cooper, 2017; Walsh et al., 2018). Often, the feedback provided to students focuses on the student's individual responsibility rather than on systems factors or safety knowledge (Cooper, 2017; Kalantarzadeh & Hosseinnejad, 2014; Lukewich et al., 2015; Walsh et al., 2018). Implementing the principles of fair and just culture, which recognize the student as a learner with novice skills and knowledge, supports quality and safety. It also creates challenges unique to academia, where expectations of student preparation and performance are high (Barnsteiner & Disch, 2017; Walker et al., 2019).

The ongoing culture of fear and reluctance to speak up by nursing students reported in the literature is not surprising given the results of an important study by Disch et al. (2017), which explored how nursing schools handled student errors and near misses. Half of the schools responding to the Disch et al. study had no policy for how to deal with student errors, and more than half had no reporting tool for safety-related events. Frequently, the response to errors articulated the personal beliefs, attitudes, and sense of justice of the responding faculty and/or administrators. Furthermore, the study reported that principles of a fair and just culture were not incorporated into school policies and that many faculty did not exactly understand what fair and just culture means.

Fair and just culture balances system accountability with individual responsibility when addressing errors. Approaching mistakes this way has been instrumental in creating a safety-focused culture in health care as it encourages individuals to report errors and near misses without fear of punishment. However, the AHRQ indicates that nonpunitive response to error has consistently remained one of the lower scoring categories in its database (AHRQ, 2021). Whether students will improve care in their health care systems by reporting errors as nurses depends on the culture of the institution that employs them and on their past experiences with reporting errors, experiences greatly shaped by the policies of their academic institutions (Dennison et al., 2022). To support excellence in nursing education and prepare the next generation of nurses to identify with these values and serve as change agents for a safer, more effective health care system, nursing education programs must adopt a robust culture that encourages safety reporting, works to identify error-prone behaviors, and supports learning from mistakes (Barnsteiner & Disch, 2017; Dennison et al., 2022; Freeman et al., 2020).

Characteristics of fair and just culture in nursing schools can include accepting that mistakes are a part of the learning process, holding students and faculty accountable for creating a safe learning environment, avoiding blame when addressing student error, and only disciplining those who are found to be reckless in their actions (Barnsteiner & Disch, 2017), all principles that support quality and safety in the practice environment. Understanding the extent to which quality and safety initiatives supported by a reporting culture are prevalent in schools of nursing is essential if schools of nursing are to develop champions for just culture (Barnsteiner & Disch, 2017).

To measure just culture in nursing education programs, a team of investigators modified the Just Culture Assessment Tool (JCAT; Petschonek et al., 2013), an instrument used to measure just culture in the practice setting. Since its development, multiple studies have assessed students' understanding of the attributes of fair and just culture in nursing education using the Just Culture Assessment Tool-Nursing Education (JCAT-NE). In a multisite study involving 15 nursing programs in eight states, Walker et al. (2020) found that students in the beginning of the nursing program (first clinical course) had higher total scores ($M$ = 133.6, $SD$ = 20.52); students at the end of the program (final semester) had the lowest total scores ($M$ = 122.22, $SD$ = 25.43). (Possible scores range from a minimum of 27 to a maximum of 189; higher scores indicate greater agreement.) The findings suggest that a change occurred in student perceptions of just culture as they progressed through their nursing education program.

Hays and Kruse (2022) used the JCAT-NE to measure student and faculty perceptions of just culture in a single school at a midwestern university and found that student and faculty mean scores did not differ significantly. As in the previous study, sizable differences were noted in mean scores of sophomore and senior students. Sophomores had the highest total scores ($M$ = 142.69, $SD$ = 29.13); seniors had the lowest total scores ($M$ = 128.31, $SD$ = 18.54). Differences in faculty scores were also noted. Those identifying as advanced beginner and competent level had higher total scores ($M$ = 148.23, $SD$ = 16.99) than those identifying as proficient and expert level, whose scores were significantly lower ($M$ = 131.35, $SD$ = 23.19). Cole et al. (2022) used the JCAT-NE to measure just culture in a single nursing school in the southeast United States. They also found that sophomores had the highest JCAT-NE total scores ($M$ = 134.56, $SD$ = 14.78); seniors had the lowest total scores ($M$ = 120.52, $SD$ = 17.69).

These studies suggest that nursing students are hesitant to report errors and near misses and that hesitancy increases as they move through their program, indicating schools have not kept pace with clinical settings with regard to establishing fair and just safety cultures. There has not been a national assessment of student experiences and understanding related to quality and safety competencies and concepts of just culture in nursing education. This study addresses that gap.

## METHOD

This study followed a quantitative descriptive design. The research purpose was to determine: 1) students' comfort with the Quality and Safety Education for Nurses (QSEN) competencies, 2) students' understanding of and experience with concepts of just culture within their nursing education programs, 3) whether students' understanding and experience of the QSEN competencies and concepts of just culture in academia are different based on their progression through the program to senior year, and 4) students' experience with reporting a safety-related event at their school. Institutional review board approval was obtained for the study.

Participants were a convenience sample of students from the diverse membership of the National Student Nurses' Association. Inclusion criteria included enrollment in a baccalaureate (BSN), associate degree (ADN), or diploma prelicensure nursing education program in the United States. The estimated 52,000 members of the National



Copyright © 2023 National League for Nursing. Unauthorized reproduction of this article is prohibited.

Student Nurses' Association were asked to participate in the study by invitation through the organization's email system. Respondents were provided a web-based link beginning with a notice of informed consent. The link remained open, and data were collected for a period of three months during spring 2021. Reminders were sent periodically to ask those who had not yet participated to consider completing the assessment. All data were deidentified.

### Instrumentation and Data Collection

This national study combined two valid and reliable instruments to create the 45-item Quality and Safety Competencies and Just Culture Assessment Questionnaire. Permission was provided to use the two instruments. The first instrument was the Nursing Quality and Safety Self-Inventory (NQSSI; Piscotty et al., 2013), a valid and reliable 18-item instrument that uses a 7-point Likert scale. Items are rated from 1 (*strongly disagree*) to 7 (*strongly agree*) to measure nursing students' self-assessment of the QSEN competencies. Exploratory factor analysis supported construct validity for the NQSSI with an internal consistency coefficient (Cronbach's alpha) of .93 (Piscotty et al., 2013).

The second instrument used to assess just culture in their nursing program as interpreted by students was the JCAT-NE (Walker et al., 2021), a valid and reliable 27-item instrument that uses a 7-point Likert scale. Scores range from 1 (*strongly disagree*) to 7 (*strongly agree*) to address six dimensions of just culture: balance, trust, openness of communication, quality of event reporting, feedback, and quality improvement. Content validation was established in a pilot study with 133 prelicensure nursing students when the JCAT-NE was newly developed; internal consistency (Cronbach's alpha) was .936 (Walker et al., 2020). A later exploratory factor analysis (Walker et al., 2021) led to the refinement of two items; because some students may never have had the experience, the word "if" was added to two questions about involvement in or witnessing a safety-related event.

Demographic data regarding the state where students attended nursing school and their type of program (BSN, ADN, or diploma) were collected to determine if there were differences across program types and to ensure data were representative of varied geographical locations and program types. Additional data included personal descriptors. Participants were asked to indicate their placement within their nursing program (beginning of the program, defined as first clinical course; middle, defined as clinical courses in semesters following fundamentals course; or end, defined as final semester of clinical courses). Participants were also asked to indicate the number of clinical courses they completed.

The survey and demographic questions were loaded into the Qualtrics® electronic survey system with a single link created for distribution. Data were compiled at the principal investigator's college. The statistical package SPSS© 27 was used for analysis, and results were considered significant at $p < .05$. Descriptive analyses included frequencies and percentages to determine categorical sample characteristics, as well as mean, median, and standard deviation for the continuous variables. In addition, data were analyzed for placement within the program (beginning, middle, end) and associations between variables. Bivariate analyses, using *t*-test, Kruskal-Wallis, Mann-Whitney *U*, and Spearman's correlation coefficient, were conducted between the student characteristics and the individual QSEN competencies and JCAT-NE items, as well as the total score for the two individual scales comprising the questionnaire.

## RESULTS

Of 568 participants who began the survey, 320 completed all questions; incomplete surveys were discarded. Data from 45 students who identified as being in an RN-BSN program and seven students who identified their program as "other" were removed, resulting in 268 eligible surveys. Forty-six states were represented in the survey results; California had the highest number of participants (21 nursing students responded to the survey), followed by New York (20) and Florida (17). Eighty-eight percent of respondents identified as female, and 10 percent identified as male (see Table 1 for demographic details). Program types represented included 117 reporting BSN, 100 reporting ADN, 46 reporting accelerated BSN (ABSN), and 5 reporting diploma.

Analysis with SPSS yielded no statistical significance in total scores of the Quality and Safety Competencies and Just Culture Assessment Questionnaire between the groups reporting as beginning, middle, or end or by program type. However, analyzed separately, the NQSSI scale was found to be statistically significant for both placement within the program ($p = .018$) and program type ($p = .015$) with

**Table 1:** Demographic Data

| | |
|---|---|
| **Gender** | |
| **Female** | 237 (88%) |
| **Male** | 28 (10%) |
| **Other/prefer not to say** | 3 (1%) |
| **Race** | |
| **Caucasian** | 185 (69%) |
| **Asian** | 23 (9%) |
| **Black** | 20 (7%) |
| **Hispanic** | 20 (8%) |
| **Native American** | 4 (1%) |
| **Other/Prefer not to say** | 16 (6%) |
| **Level in program** | |
| **Beginning (in first clinical course)** | 49 (18%) |
| **Middle (in clinical course post fundamentals)** | 122 (45%) |
| **End (in final semester)** | 97 (36%) |
| **Age** | |
| **18–20 years** | 21 (8%) |
| **21–29 years** | 100 (37%) |
| **30–39 years** | 88 (33%) |
| **40–49 years** | 41 (15%) |
| **Over 50 years** | 18 (7%) |



Copyright © 2023 National League for Nursing. Unauthorized reproduction of this article is prohibited.

a high coefficient of reliability (Cronbach's alpha = .957). Five items focused on confidence related to knowledge of QSEN competencies and skills to deliver safe nursing care were significant for placement within the program (Table 2).

The JCAT-NE scale analyzed separately demonstrated significance for program type ($p$ = .016). Participants enrolled in BSN programs had the lowest mean total score ($M$ = 139.46, $SD$ = 25.06), those in ABSN and in ADN programs were slightly higher (ABSN, $M$ = 142.21, $SD$ = 23.88; ADN, $M$ = 142.74, $SD$ = 21.85), and those enrolled in diploma programs had the highest ($M$ = 178.20, $SD$ = 10.23). The JCAT-NE mean total score was 144.88, with a high coefficient of reliability (Cronbach's alpha = .944).

Students who identified as being at the beginning of their nursing program had the highest JCAT-NE mean total score ($M$ = 144.06, $SD$ = 23.64); mean total score for students at the middle of their program decreased slightly ($M$ = 143.74, $SD$ = 23.48). The lowest JCAT-NE mean total score was reported by students at the end of their program ($M$ = 138.43, $SD$ = 24.63). Individual items of significance based on placement within the program are reported in Table 3. The single, most significant item was "Does your nursing program have a safety-related event reporting system?" Those responding "yes" had a total JCAT-NE mean score of 152.64; those responding "I am not sure" had a mean total score of 136.45; and those responding "no" had a mean total score of 119.25 ($p \leq .001$).

## DISCUSSION

This study's participants represented a cross-section of nursing students from across the United States with gender breakdowns similar to workplace statistics from the US Bureau of Labor Statistics (2022). Although a higher response rate would have been ideal, Blackstone (2021) reported that low response rates do not make a significant difference in findings or sample representativeness. The combination of the two scales folded into a single instrument yielded no statistical significance; analyzed separately, each scale yielded significant findings.

The increase of mean scores for the QSEN competencies as students moved from the beginning of the program to the end suggests nurse educators are integrating quality and safety concepts into the curriculum. It is important to note that the majority of significant items were related to knowledge, which represents the cognitive domain. Knowledge is only one constituent of competency (Rotthoff et al., 2021). As nursing education and practice move toward measuring competence, which also includes the psychomotor and affective domains, nurse educators will need more robust measures to evaluate competence related to quality and safety.

The findings related to just culture support findings of previous studies that represented more narrowly defined populations. The lower total scores of the JCAT-NE for those reporting placement at the end of the program versus the scores of those at the beginning of the program suggest that something in the nursing education process changes the perception of students regarding whether errors should be reported by those who make them. The increase in scores related to fear of disciplinary action for errors as students move through the program suggests a learned behavior associating error reporting with a punitive response.

Students enrolled in BSN programs had significantly lower mean total scores than those enrolled in ADN, ABSN, and diploma programs. This suggests program differences regarding how student errors are managed. Program differences regarding size of the program, clinical time with exposure to processes in health care settings and practicing nurses, relationships with clinical and course faculty, and having the same faculty for clinical and coursework may affect the trust students have regarding comfort in admitting mistakes. Students in diploma programs follow an apprenticeship model with significantly more clinical time than BSN programs, which may have contributed to the higher scores. The single, most significant item asked whether the nursing program has a safety-related event reporting system. Those in programs that had such a process demonstrated significantly higher JCAT-NE scores, suggesting the importance of having a process in place to report and manage student error.

## IMPLICATIONS FOR NURSING EDUCATION

The findings of this study support that quality and safety concepts are being integrated into the nursing curriculum. They also shed light on areas where improvement can be made to develop champions for just culture and have a positive impact in practice. The progressive decline in mean total scores for the JCAT-NE for students from the

**Table 2:** Mean Nursing Quality and Safety Self-Inventory Items for Beginning, Middle, and End Program Placement With Statistical Significance

| Item | Beginning Mean (*SD*) | Middle Mean (*SD*) | End Mean (*SD*) | *p* |
|---|---|---|---|---|
| ***I feel confident that I have the necessary:*** | | | | |
| ***knowledge* to ensure an effective nursing practice based on teamwork and collaboration.** | 5.69 (1.19) | 5.90 (1.15) | 6.11 (1.060) | .039 |
| ***knowledge* to achieve an evidence-based nursing practice.** | 5.37 (1.67) | 5.87 (1.14) | 6.11 (0.911) | .05 |
| ***knowledge* to deliver safe nursing care.** | 5.37 (1.74) | 5.94 (1.13) | 6.16 (0.909) | .042 |
| ***skills* to deliver safe nursing care.** | 5.27 (1.72) | 5.69 (1.23) | 6.05 (0.993) | .013 |
| ***knowledge* to integrate and utilize technology in nursing practice.** | 5.41 (1.63) | 5.80 (1.08 | 6.13 (0.920) | .009 |



Copyright © 2023 National League for Nursing. Unauthorized reproduction of this article is prohibited.

**Table 3:** Mean Just Culture Assessment Tool Score Based on Program Placement

| Item | Beginning *n* = 49 | Middle *n* = 122 | End *n* = 97 | *p* |
|---|---|---|---|---|
| **Students fear disciplinary action when involved in a safety-related event. (reverse scored)** | 5.20 (1.12) | 5.47 (1.13) | 5.59 (1.05) | .041 |
| **I feel comfortable reporting about safety-related events where others were involved.** | 5.51 (1.33) | 5.12 (1.56) | 4.96 (1.61) | .05 |
| **There are improvements because of safety-related event reporting.** | 5.33 (1.31) | 5.28 (1.43) | 4.92 (1.40) | .04 |
| **The nursing program devotes (time/energy/resources) toward making safer learning experiences and improved patient safety.** | 5.63 (1.42) | 5.76 (1.3) | 5.35 (1.52) | .048 |
| **The nursing program sees safety-related events as opportunities for improvement.** | 5.65 (1.05) | 5.67 (1.43) | 5.19 (1.52) | .012 |

beginning to the end of the academic program supports findings from previous studies (Cole et al., 2022; Hays & Kruse., 2022; Walker et al., 2020). Collectively, these studies provide a clear lens into the current culture in nursing academia regarding how errors and near misses are addressed and should serve as an impetus for organizational change within nursing education. The significant difference in JCAT-NE mean total scores between those responding that their nursing program has a safety-related event-reporting system and those responding that their program does not have a system amplifies the need for implementing structured processes to address student error within academic environments.

This study identifies differences in understanding concepts of fair and just culture for students at the beginning, middle, and end of their nursing education program as well as differences noted within the type of program (BSN, ADN, diploma). It is concerning that students with the lowest scores regarding concepts of fair and just culture are on the cusp of entering practice. To support the safety of patients, it is essential to isolate periods during the education process where student nurse understanding and perception regarding fair treatment when reporting errors change so that action can be taken to appropriately socialize students for their role as safety advocates and vigilant change agents.

This study establishes a baseline upon which to build and support the adoption of a culture of safety that fosters the reporting of errors and near misses throughout prelicensure nursing education. Conducting targeted interventions to positively impact the safety culture of nursing education is integral if concepts of fair and just culture are to be sustained in the practice setting. Students who fear reporting events while in their formative nursing education are likely to fear reporting events once in a practice role (Barnsteiner & Disch, 2017).

In Sentinel Event Alert 57, The Joint Commission (2017) identifies the fundamental elements of a safety culture as inclusion of a just culture, a reporting culture, and a learning culture. Safety is supported by a just culture that encourages the reporting of errors by responding in a way that acknowledges the fallibility of humans, differentiating between human error and at-risk behaviors. However, reporting errors is only the first step; reporting opens the door to learning from mistakes so that prevention strategies may be developed to mitigate future error and decrease safety risks (Dennison et al., 2022).

Nursing education needs to align with concepts of fair and just culture. Identity formation for nurses begins during prelicensure education, and if nursing students are to develop into advocates for fair and just culture, they must recognize the essential elements of a safety culture in their education program (Secginli et al., 2021). Faculty role modeling the behaviors and practices of just culture through deliberate actions that include creating a safe and transparent error reporting system will support the development of a just culture within academic programs (Cole et al., 2022). Monitoring errors and near misses involving students throughout the program allows faculty to identify key areas where system changes within the academic program can be implemented to mitigate future errors. Students should remain accountable to implementing routines of safety to prevent errors, and faculty should analyze the data related to documented errors, identifying opportunities for program improvements, thus providing the balance between individual responsibility and system accountability.

Creating a just culture is a process that takes years to develop (Paradiso & Sweeney, 2019). The significant number of participants responding that they did not know if their program has a safety-related event-reporting system is helpful in identifying a starting point for this process; schools of nursing can address this by introducing concepts of fair and just culture during program orientation. Other strategies for developing a safety culture that includes a just culture, a reporting culture, and a learning culture can include providing ongoing education for faculty and students, developing a process for error management within academic programs, incentivizing the reporting of errors and near misses, and measuring progress along the way. The JCAT-NE can support the evaluation of concepts integral to fair and just culture such as communication and trust between nursing students and didactic and clinical faculty as a reliable measure of nursing education program effectiveness (Walker et al., 2019). The JCAT-NE can be used to establish a baseline for how just culture is perceived in the program and then used to evaluate progress as the program implements a robust agenda to create a safety culture and support the development of champions for fair and just culture.

The American Association of Colleges of Nursing's (2021) *Essentials* explicitly call for just culture in nursing academia. Trust is critical to



Copyright © 2023 National League for Nursing. Unauthorized reproduction of this article is prohibited.

shared accountability in a just culture (Paradiso & Sweeney, 2019). The adoption of structured processes for reporting and managing errors will support this competency, creating standards by which every student can expect to be treated the same when an error occurs, rather than fearing that actions taken following an error will rely on the judgment of the individual educator. Nurse educators are in a unique position to positively impact the safety culture of health care by creating a safety culture within academia and developing nurses with a professional identity that champions the principles of fair and just culture. The work must begin with faculty and academic leaders recognizing the opportunity for improvement and taking the steps to create the balance between individual responsibility and system accountability that defines a fair and just culture.

## LIMITATIONS

The study used a convenience sample of students. Combining two instruments for a total of 45 questions may have limited nursing students' willingness to complete the survey. Differences in the length of program for those enrolled in ABSN programs were not considered. The analysis was limited to consideration of program type and placement within the program; the number of participants representing each program type from each state was not analyzed. Future research may consider a longitudinal study of individuals throughout their nursing program and into the first year of practice, as well as investigating the impact of variables not explored in this study.

## CONCLUSION

A fair and just culture is essential to patient safety in that it supports the identification of errors and error-prone behaviors without threat of punishment so that practice can be modified and strategies put in place to prevent future errors and improve practice. It balances a concern for individual responsibility and system effectiveness. It does not eliminate appropriate disciplinary action but is based on two key premises: 1) a thorough review of all the factors in a situation will be conducted before any remedial action is recommended, and 2) most situations have significant system implications that must be addressed if similar errors or near misses are to be prevented in the future. To prepare the next generation of nurses to identify with these values and serve as change agents for a safer, more effective health care system, it is crucial for nursing education programs to adopt a fair and just culture that encourages safety reporting, identifies error-prone behaviors, and supports learning from mistakes.

## REFERENCES


Agency for Healthcare Research and Quality. (2019). *Patient safety primer: Culture of safety*. https://psnet.ahrq.gov/issue/patient-safety-and-just-culture-primer-health-care-executives

Agency for Healthcare Research and Quality. (2021). *Surveys on patient safety culture hospital survey 2.0: 2021*. https://www.ahrq.gov/sites/default/files/wysiwyg/sops/surveys/hospital/2021-HSOPS2-Database-Report-Part-I-508-rev0921.pdf

American Association of Colleges of Nursing. (2021). *The essentials: Core competencies for professional nursing education*. https://www.aacnnursing.org/Portals/42/AcademicNursing/pdf/Essentials-2021.pdf

American Nurses Association. (2010). *Position statement on just culture*. https://www.nursingworld.org/~4afe07/globalassets/practiceandpolicy/health-and-safety/just_culture.pdf

Asensi-Vicente, J., Jimenez-Ruiz, I., & Vizcaya-Moreno, M. F. (2018). Medication errors involving nursing students: A systematic review. *Nurse Educator*, *45*(5), E1–E5. https://doi.org/10.1097/NNE0000000000000481

Barnsteiner, J., & Disch, J. (2017). Creating a fair and just culture in schools of nursing. *American Journal of Nursing*, *117*(11), 42–48. https://doi.org/10.1097/01.NAJ.0000526747.84173.97

Blackstone, A. (2021). Analysis of survey data (Chapter 8). In *Principles of social inquiry—Qualitative and quantitative methods*. Social Sciences Libretexts. https://socialsci.libretexts.org/Bookshelves/Sociology/Introduction_to_Research_Methods/Book%3A_Principles_of_Sociological_Inquiry__Qualitative_and_Quantitative_Methods_(Blackstone)

Christensen, L. (2018). Are clinical instructors preventing or provoking adverse events involving students: A contemporary issue. *Nursing Education Today*, *70*, 121–123. https://doi.org/10.1016/j.nedt.2018.08.024

Cole, M., Douville, C., Chlebowski, A., Cole, M., & Milner, K. A. (2022). Implementation of just culture policy in nursing programs to support quality safety competency. *The Journal of Nursing Education*, *61*(12), 706–710. https://doi.org/10.3928/01484834-20221003-06

Cooper, E. (2017). Nursing students' perception of safety in clinical settings: From the quality and safety officer. *Journal of Nursing Education and Practice*, *7*(10), 91–97. https://doi.org/10.5430/jnep.v7n10p91

Dehvan, F., Dehkordi, A. H., Gheshlagh, R. G., & Kurdi, A. (2021). The prevalence of medication errors among nursing students: A systematic and meta-analysis study. *International Journal of Preventive Medicine*, *12*, 21. https://doi.org/10.4102/ijpvm.IJPVM_418_19

Dennison, S., Freeman, M., Giannotti, N., & Ravi, P. (2022). Benefits of reporting and analyzing nursing students' near-miss medication incidents. *Nurse Educator*, *47*(4), 202–207. https://doi.org/10.1097/NNE.0000000000001164

Disch, J., Barnsteiner, J., Connor, S., & Brogren, F. (2017). CE: Original research: Exploring how nursing schools handle student errors and near misses. *American Journal of Nursing*, *117*(10), 24–31. https://doi.org/10.1097/01.NAJ.0000525849.35536.74

Edwards, M. T. (2018). An assessment of the impact of just culture on quality and safety in US hospitals. *American Journal of Medical Quality*, *33*(5), 502–508. https://doi.org/10.1177/1062860618768057

Eng, D. M., & Schweikart, S. J. (2020). Why accountability sharing in health care organizational cultures means patients are probably safer. *AMA Journal of Ethics*, *22*(9), E779–E783. https://doi.org/10.1001/amajethics.2020.779

Fagan, A., Parker, V., & Jackson, D. (2016). A concept analysis of undergraduate nursing students speaking up for patient safety in the patient care environment. *Journal of Advanced Nursing*, *72*(10), 2346–2357. https://doi.org/10.1111/jan.13028

Freeman, M., Dennison, S., Giannotti, N., & Voutt-Goos, M. (2020). An evidence-based framework for reporting student nurse medication incidents: Errors, near misses and discovered errors. *Quality Advancement in Nursing Education*, *6*(3), Article 4. https://doi.org/10.17483/2368-6669.1233

Gorini, A., Miglioretti, M., & Pravettoni, G. (2012). A new perspective on blame culture: An experimental study. *Journal of Evaluation in Clinical Practice*, *18*(3), 671–675. https://doi.org/10.1111/j.1365-2753.2012.01831.x

Halperin, O., & Bronshtein, O. (2019). The attitudes of nursing students and clinical instructors towards reporting irregular incidents in the medical clinic. *Nurse Education in Practice*, *36*, 34–39. https://doi.org/10.1016/j.nepr.2019.02.018

Hays, D., & Kruse, J. A. (2022). Nursing student and faculty perceptions of just culture. *The Journal of Nursing Education*, *61*(5), 257–260. https://doi.org/10.3928/01484834-20220303-10

Institute of Medicine. (2000). *To err is human: Building a safer health system*. National Academies Press. https://doi.org/10.17226/9728

Jones, J., Treiber, L., Shabo, R., Emerson, C., & Harkins, V. (2021). *Just culture, medication error prevention, and second victim support: A better prescription for preparing nursing students for practice* [White paper]. WellStar School of Nursing, WellStar College of Health and Human Services, Kennesaw State University.

Kalantarzadeh, M., & Hosseinnejad, M. (2014). Underreporting of medication errors in nursing students: A threat to patient safety. *Journal of Medical Ethics and History of Medicine*, *7*(11), 1–7.

Lukewich, J., Edge, D. S., Tranmer, J., Raymond, J., Miron, J., Ginsburg, L., & VanDenKerkhof, E. (2015). Undergraduate baccalaureate nursing students' self-reported confidence in learning about patient safety in the classroom and clinical settings: An annual cross-sectional study (2010–2013). *International Journal of Nursing Studies*, *52*(5), 930–938. https://doi.org/10.1016/j.ijnurstu.2015.01.010

Marx, D. (2001). *Patient safety and the just culture: A primer for health care executives*. Trustees of Columbia University.

Paradiso, L., & Sweeney, N. (2019). Just culture: It's more than policy. *Nursing Management*, *50*(6), 38–45. https://doi.org/10.1097/01.NUMA.0000558482.07815.ae

Penn, C. E. (2014). Integrating just culture into nursing student error policy. *The Journal of Nursing Education*, *53*(9 Suppl), S107–S109. https://doi.org/10.3928/01484834-20140806-02

Petschonek, S., Burlison, J., Cross, C., Martin, K., Laver, J., Landis, R. S., & Hoffman, J. M. (2013). Development of the Just Culture Assessment Tool: Measuring the perceptions of health-care professionals in hospitals. *Journal of Patient Safety*, *9*(4), 190–197. https://doi.org/10.1097/PTS.0b013e31828fff34




Copyright © 2023 National League for Nursing. Unauthorized reproduction of this article is prohibited.

Piscotty, R., Grobbel, C., & Abele, C. (2013). Initial psychometric evaluation of the nursing quality and safety self-inventory. *The Journal of Nursing Education*, *52*(5), 269–274. https://doi.org/10.3928/01484834-20130412-03

Rotthoff, T., Kadmon, M., & Harendza, S. (2021). It does not have to be either or! Assessing competence in medicine should be a continuum between an analytic and a holistic approach. *Advances in Health Sciences Education*, *26*, 1659–1673. https://doi.org/10.1007/s10459-021-10043-0

Secginli, S., Nahcivan, N. O., Bahar, Z., Fernandez, R., & Lapkin, S. (2021). Nursing students' intention to report medication errors: Application of theory of planned behavior. *Nurse Educator*, *46*(6), E169–E172. https://doi.org/10.1097/NNE0000000000001105

The Joint Commission. (2017) *Sentinel Event Alert 57: The essential role of leadership in developing a safety culture*. https://www.jointcommission.org/resources/sentinel-event/sentinel-event-alert-newsletters/sentinel-event-alert-57-the-essential-role-of-leadership-in-developing-a-safety-culture/#.Y4KN_HbMKUk

US Bureau of Labor Statistics. (2022). *Labor force statistics from the current population survey*. https://www.bls.gov/cps/cpsaat11.htm

Usher, K., Woods, C., Parmenter, G., Hutchinson, M., Mannix, J., Power, T., Chaboyer, W., Latimer, S., Mills, J., Siegloff, L., & Jackson, D. (2017). Self-reported confidence in patient safety knowledge among Australian undergraduate nursing students: A multi-site cross-sectional survey study. *International Journal of Nursing Studies*, *71*, 89–96. https://doi.org/10.1016/j.ijnurstu.2017.03.006

Walker, D., Altmiller, G., Barkell, N., Hromadik, L., & Toothaker, R. (2019). Development and validation of the Just Culture Assessment Tool for Nursing Education. *Nurse Educator*, *44*(5), 261–264. https://doi.org/10.1097/NNE.0000000000000705

Walker, D., Altmiller, G., Hromadik, L., Barkell, N., Barker, N., Boyd, T., Compton, M., Cook, P., Curia, M., Hays, D., Flexner, R., Jordan, J., Jowell, V., Kaulback, M., Magpantay-Monroe, E., Rudolph, B., Toothaker, R., Vottero, B., & Wallace, S. (2020). Nursing students' perceptions of just culture in nursing programs: A multisite study. *Nurse Educator*, *45*(3), 133–138. https://doi.org/10.1097/NNE.0000000000000739

Walker, D., Hromadik, L., Altmiller, G., Barkell, N., Toothaker, R., & Powell, K. (2021). Exploratory factor analysis of the Just Culture Assessment Tool for Nursing Education. *Journal of Research in Nursing*, *26*(1–2), 49–59. https://doi.org/10.1177/1744987120951589

Walsh, L. J., Anstey, A. J., & Tracey, A. M. (2018). Student perceptions of faculty feedback following medication errors—A descriptive study. *Nursing Education and Practice*, *33*, 10–16. https://doi.org/10.1016/j.nepr.2018.08.017

Lippincott® NursingCenter®

NCPD Nursing Continuing Professional Development

**TEST INSTRUCTIONS**

- Read the article. The test for this nursing continuing professional development (NCPD) activity is to be taken online at **www.NursingCenter.com/CE/NEP**. Tests can no longer be mailed or faxed.
- You'll need to create an account (it's free!) and log in to access My Planner before taking online tests. Your planner will keep track of all your Lippincott Professional Development online NCPD activities for you.
- There's only one correct answer for each question. A passing score for this test is 8 correct answers. If you pass, you can print your certificate of earned contact hours and access the answer key. If you fail, you have the option of taking the test again at no additional cost.
- For questions, contact Lippincott Professional Development: 1-800-787-8985.
- Registration deadline is March 6, 2026

**PROVIDER ACCREDITATION**

Lippincott Professional Development will award 2.5 contact hours for this nursing continuing professional development activity.

Lippincott Professional Development is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation.

This activity is also provider approved by the California Board of Registered Nursing, Provider Number CEP 11749 for 2.5 contact hours. Lippincott Professional Development is also an approved provider of continuing nursing education by the District of Columbia, Georgia, West Virginia, New Mexico, South Carolina, and Florida, CE Broker #50-1223. Your certificate is valid in all states.

**Payment:** The registration fee for this test is $24.95.



Copyright © 2023 National League for Nursing. Unauthorized reproduction of this article is prohibited.