

# Communication Under Pressure



1.5 ANCC  
Contact  
Hours

## *A Quasi-Experimental Study to Assess the Impact of a Structured Curriculum on Skilled Communication to Promote a Healthy Work Environment*

Lindsay Jones, BSN, RN, CPN, CHPPN ○  
 Genieveve J. Cline, PhD, DNP, APRN, NNP-BC, CNE, RN-BC ○  
 Kentlee Battick, MSN, RN, CCRN, CNL ○  
 Kristina J. Burger, DNP, APRN, CPNP, CCRN, RN-BC, LNC ○ Ernest K. Amankwah, PhD

Effective communication in health care is a mainstay of patient safety and staff perception of a healthy work environment. A quasi-experimental study was conducted to assess the impact of a course on staff perceptions of communication. A Wilcoxon signed-ranks test indicated a statistically significant difference between pre and post scores for the self-assessment component of the Healthy Work Environment Instrument ( $p = .0005$ ); coworker assessments revealed borderline statistical significance ( $p = .056$ ).

A lack of skilled communication in healthcare settings has been shown to negatively affect patient safety and quality (Missi, 2016; The Joint Commission, 2017a). In the healthcare industry from 2011 to 2013, communication has been reported as one of the top root causes of sentinel events (The Joint Commission, 2017b). Several studies have even reported that the lack of skilled communication is a primary contributing factor leading to medical errors (The Joint Commission, 2017b). These reports

alone express the overwhelming need to make skilled communication an essential part of a healthy work environment. The Joint Commission published a sentinel alert for healthcare professionals on the importance of skilled communication in patient handoff procedures to promote patient safety and quality (The Joint Commission, 2017a). The report included seven strategies to promote high-quality handoffs related to communication (The Joint Commission, 2017a, pp. 3–5; The Joint Commission, 2017c). Briefly, these seven strategies include leadership commitment to successful handoff and a culture of safety, use of a standardized tool, conducting handoff in a location free of interruptions, providing standardized training, use of the electronic health record and other technologies to enhance handoff, monitoring progress of handoff quality improvement initiatives, sustaining and spreading best practices related to handoff, and making handoff a cultural priority in the organization.

Ineffective communication between physicians and nurses has long been recognized as a contributing cause of preventable patient harm as well as increased patient length of stay and resource utilization (Institute of Medicine, 2004; Manojlovich, 2013). Ineffective communication has also been shown to adversely affect staff's perception of a healthy work environment, which has been associated with poor staff satisfaction and increased turnover (Hartung & Miller, 2013). Previous evidence suggests that there are three primary elements that nurse leaders can use to support a healthy work environment, including effective communication, building collaborative relationships, and promotion of staff decision-making (Blake, 2015; Blake, Leach, Robbins, Pike, & Needleman, 2013; Shirley, 2017). Hartung and Miller (2013) assert that communication is a skill that can be learned. Nurse manager participants described multiple strategies to improve communication to support a healthy work environment, including providing more time to communicate, encouraging open honest discussions, correcting rumors quickly, taking responsibility for communications, and listening. Blake (2016) contends that effective communication, authentic leadership, meaningful recognition, collaboration and decision-making are all contributing factors to a healthy work environment that

**Lindsay Jones, BSN, RN, CPN, CHPPN**, is Clinical Nurse, Johns Hopkins All Children's Cancer & Blood Disorders Institute, Johns Hopkins All Children's Hospital, St. Petersburg, Florida.

**Genieveve J. Cline, PhD, DNP, APRN, NNP-BC, CNE, RN-BC**, Department of Clinical Education and Research, Johns Hopkins All Children's Hospital, St. Petersburg, Florida.

**Kentlee Battick, MSN, RN, CCRN, CNL**, Pediatric Intensive Care Unit, Institute for Brain Protection Sciences, Johns Hopkins All Children's Hospital, St. Petersburg, Florida.

**Kristina J. Burger, DNP, APRN, CPNP, CCRN, RN-BC, LNC**, is Clinical Policy & Regulatory Readiness Manager, Nursing Administration, Johns Hopkins All Children's Hospital, St. Petersburg, Florida.

**Ernest K. Amankwah, PhD**, Department of Oncology, Johns Hopkins University School of Medicine, Baltimore, Maryland, and Cancer and Blood Institute, Johns Hopkins All Children's Hospital, and All Children's Research Institute, St. Petersburg, Florida.

This research was supported by the Johns Hopkins All Children's Hospital Cancer & Blood Disorders Institute Special Unit Fund.

The authors report no conflict of interest. The authors alone are responsible for the content and writing of this article.

**ADDRESS FOR CORRESPONDENCE:** Lindsay Jones, Johns Hopkins All Children's Cancer and Blood Disorders Institute, Johns Hopkins All Children's Hospital, 501 Sixth Avenue South, St. Petersburg, FL 33701 (e-mail: ljones98@jhmi.edu).

DOI: 10.1097/NND.0000000000000573

need to be addressed within an organizational culture to promote staff retention. The culture of the workplace has been reported to be one of the most influential determinants to staff satisfaction, commitment, and engagement in an organization (Brunges & Foley-Brinza, 2014). At the same time, organizational culture can often be difficult to change because it is frequently so deeply embedded (Brunges & Foley-Brinza, 2014).

The American Association of Critical Care Nurses (AACN, 2016) developed six essential standards to promote a healthy work environment. The six standards include *skilled communication, true collaboration, effective decision-making, appropriate staffing, meaningful recognition, and authentic leadership* (AACN, 2016). A skilled communicator has been defined as a person who conveys the meaning of their message with great clarity (Blosky & Spegman, 2015). According to the AACN (2016), in order to become a skilled communicator, a nurse must become proficient in each of the following five factors: *becoming aware of self-deception, becoming authentic, becoming candid, becoming mindful, and becoming reflective*. To provide education and proficiency for the interdisciplinary staff (including bedside nurses, nurse managers, advance practice providers, and physicians), the study team developed an educational course that focused on these five factors.

## Statement of the Problem

The annual employee engagement survey results indicated that there were opportunities for improvement related to communication between the interdisciplinary team members on the Oncology/Hematology/Bone Marrow Transplant (Hem/Onc/BMT) unit, which was negatively effecting the nurse's perception of a healthy work environment.

## Purpose

The purpose of this study was to determine the effectiveness of the course (*Communication Under Pressure*) to promote a healthy work environment.

## Research Questions

1. What are the perceived barriers and facilitators to skilled communication between nurses and physicians/advanced practice providers from a Hem/Onc/BMT unit in an acute care pediatric hospital setting?
2. Can the perceived barriers and facilitators to skilled communication among the interdisciplinary care team members be modified by the implementation of an educational curriculum on skilled communication?

## METHODS

### Approvals

The study was approved by the institutional review board at the hospital study site prior to the start of the study and was supported by the Hem/Onc/BMT Special Unit Fund.

## Design/Setting

A quasi-experimental pretest/posttest study was conducted to assess the impact of a structured course (*Communication Under Pressure*) on the perceived barriers and facilitators to skilled communication and perceptions of a healthy work environment between nurses, advanced practice providers, and physicians employed on a Hem/Onc/BMT unit in an acute care pediatric hospital in Southwest Florida.

## Recruitment

E-mails and posted flyers with the study information were distributed to the staff of the Hem/Onc/BMT unit. All nurses, physicians, and advance practice providers working full time on the Hem/Onc/BMT unit were eligible to participate. The flyer described the purpose, benefits and risks, and requirements associated with participation in the study. Staff who attended the course and completed the required study documents were considered to have met the standard for implied consent.

## Measurement Instruments

Participants were asked to complete three study documents, a demographic tool, the Mays, Hrabe, and Stevens (2011) Healthy Work Environment Instrument (HWEI), as well as the Perceived Barriers and Facilitators to Skilled Communication Sheet (PBFSCS). The demographic tool was created specifically for the study by the principal investigator. The demographic tool included items on participants' current position (staff nurse, charge nurse/education/leadership, advanced registered nurse practitioner [ARNP], physician [MD]), highest degree earned (diploma/associates degree, BSN/BA, master's, or above), certification by category (yes, no), and number of years worked (0–5 years, 5–10 years, 10–20 years, 20 years or greater).

The Mays et al. (2011) HWEI is a 14-item measurement tool divided into seven items that relate to self-assessment and seven items that relate to assessment of coworker competence in skilled communication to support a healthy work environment. Participants were asked to complete the tool before and after the course. Each participant was given a course packet, which included all the required study documents coded with their unique study identification number and indicating pre versus post. Participants were asked to grade each of the 14 items on the Likert-type scale as F (failing), D (below average), C (average), B (above average), or A (well above average). Permission was obtained from the authors to use the tool. The published overall Cronbach  $\alpha$  values were .75 for the self-rating subscale and .89 for the coworkers rating subscale (Mays et al., 2011).

The PBFSCS tool asked the participants to list up to three perceived barriers/facilitators to using the strategies to promote skilled communication as outlined by the AACN in the current environment. The PBFSCS was created specifically

for the study, and participants were asked to complete the survey before and after the course. As an investigator-created tool, the PBFSCS has not had any prior psychometric testing to provide empirical evidence to support the validity and reliability of the tool. The open-ended questions were written to better understand the challenges the staff face related to using effective communication to promote a healthy work environment.

### Study Procedures

A convenience sample of eligible staff ( $n = 26$ ) who were interested in participating were asked to contact a specific member of the study team to be scheduled for a course session convenient for them to attend. Attendance of the course and completion of the required study documents constituted implied consent. A temporary key code was used to link the participants name to the respective assigned class and was viewed by only assigned study members who did not teach the course. The temporary key code was kept in a locked cabinet in the coinvestigator's office and was destroyed once all the data were analyzed. Participants were given a course packet prepared by the study team member who coordinated the classes. The course packet contained a copy of the demographic sheet and two copies of the Mays et al. (2011) HWEI (pre and post), two copies of the PBFSCS (pre and post), and a manila envelope to seal their results at the completion of the course. Participants were asked to complete the demographic sheet (estimated to take 10 minutes to complete), the HWEI (estimated to take 15 minutes to complete) pre and post, and the PBFSCS (estimated to take 15 minutes to complete) pre and post attendance of a 5-hour course on effective communication (which included 4 hours of content).

Participants were asked to sign a confidentiality statement prior to completion of the course to promote a safe learning environment and participant confidentiality. The participants were instructed not to include their name or any other identifiers on their study documents. To protect participant confidentiality, they were instructed to place all of their completed study documents containing their unique identifier number into the manila envelope provided with their course packets and seal the top at the completion of the course. The unique identifier number on the study documents were used to correlate the pre- and posttest results for each participant.

### Curriculum

*Communication Under Pressure* was based on the AACN's Healthy Work Environment Standard of Skilled Communication and highlighted the five critical elements of being a skilled communicator (being mindful, being candid, being reflective, being aware of self-deception, and being more authentic; AACN, 2016; Kupperschmidt, Kientz, Ward, & Reinholz, 2010). The course included short didactic segments

using active learning strategies targeted for adult learners. For example, the course included scenario-based videos depicting simulated communication experiences requiring the participants to, individually and in small groups, critically think through the videos and determine effective and noneffective communication strategies. The participants were then challenged during the facilitated discussion sessions of the course to share how the critical concepts of skilled communication could have been used by the respective team members in the videos to bring about a healthier work environment. The course provided the opportunity to prepare and practice skilled communication in realistic situations that occur on the study's unit every day. Team building exercises such as role-playing scenarios using skilled communication were also incorporated to provide participants with a clear mental model of skilled communication and a healthy work environment. One of the faculty

	Frequency	Percent
Current clinical position		
Staff nurse	20	76.9
Charge nurse/education/ leadership	6	23.1
ARNP	0	
MD	0	
Total	26	100.0
Highest degree earned		
Diploma/associates degree	2	7.7
BSN/BA	19	73.1
Master's or above	5	19.2
Total	26	100.0
Certification		
No	14	53.8
Yes	12	46.2
Total	26	100.0
Number of years worked		
0–5 years	18	69.2
5–10 years	4	15.4
10–20 years	1	3.8
20 years or greater	3	11.5
Total	26	100.0

facilitating each of the course sessions was a doctorally prepared, experienced advanced education specialist with certification as a nursing professional development specialist. The participants received four nursing contact hours from the Florida Board of Nursing for their completion of the course.

### Analysis Plan

Participants' demographic data are reported as frequencies and percentages. The letter grades, which were obtained from the Mays et al. (2011) HWEI were coded to numeric values ranging from F, failing = 0, to A, well above average = 4, to compute mean scores for each item and grand mean scores. The Wilcoxon signed-ranks test was used to analyze the quantitative data to test for statistically significant differences in self and coworker pretest and posttest

scores on the Mays et al. (2011) HWEI. In addition, responses for questions were summarized with percentages comparing pre and post responses for each item using the McNemars test. For these comparisons, we combined "above average" and "well above average" responses. Statistical analysis was performed using SAS v 9.4, and a *p* value of <.05 was considered statistically significant. The qualitative data from PBFSCS related to the perceived barriers, and facilitators was analyzed using ATLAS.ti software into themes with supporting quotes.

### RESULTS

The study participants (*n* = 26) were all pediatric Hem/Onc/BMT nurses. The demographics of the study sample are described with respect to current clinical position, highest

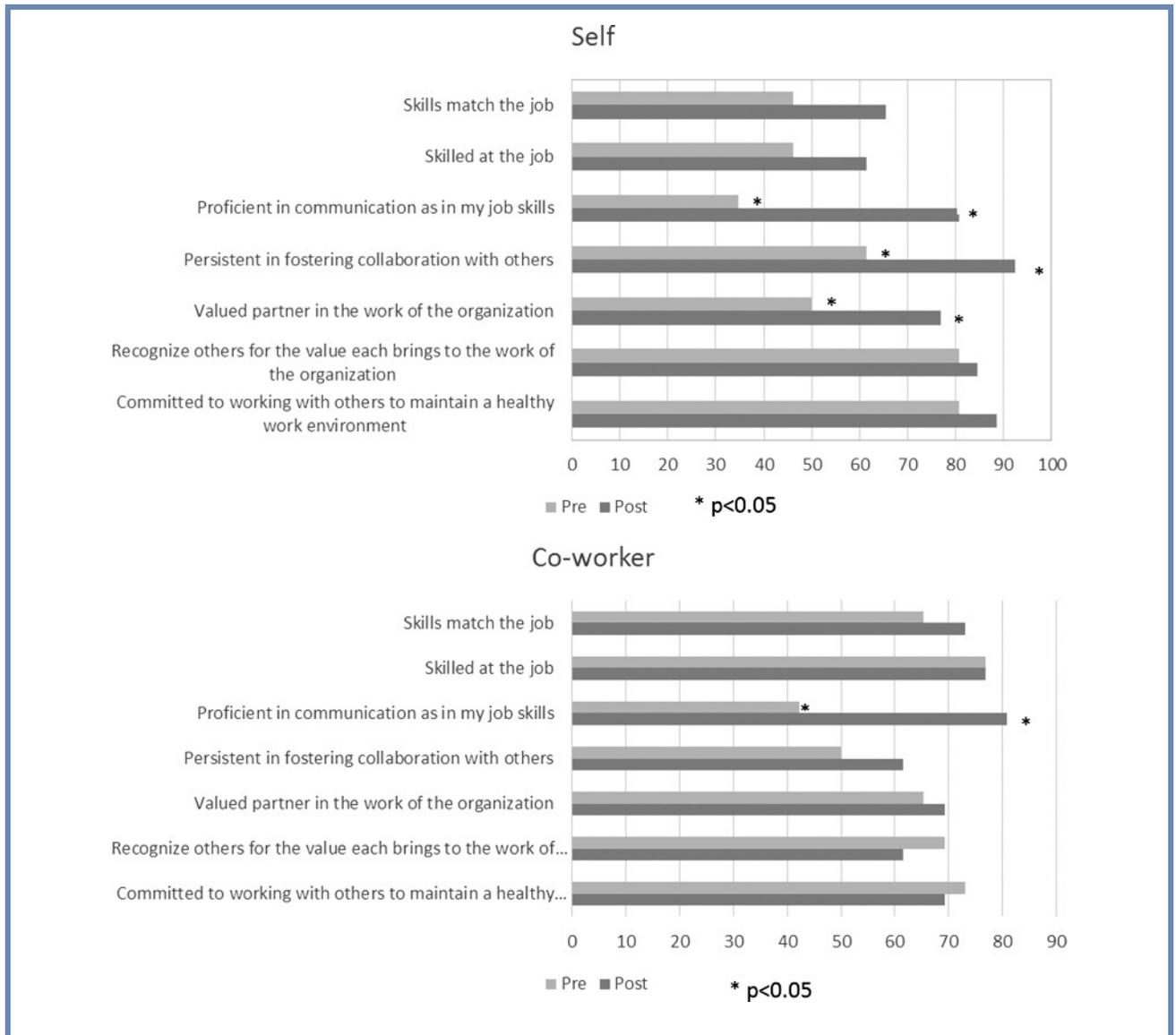


FIGURE 1. Healthy Work Environment Instrument (self-pretest and -posttest question results).

degree earned, certification status, and number of years worked (see Table 1).

The Wilcoxon signed-ranks test result indicated a statistically significant difference between pre and post scores for the self-assessment component of the HWEI (Wilcoxon signed-rank = 79.5,  $n = 26$ ,  $p = .0005$ ). The difference between the pre and post scores for the coworker assessment component of the HWEI, however, was of borderline statistical significance (Wilcoxon signed-rank = 50,  $n = 26$ ,  $p = .056$ ). A comparison of individual items for the self-assessment component of the HWEI showed a statistically significant increase in “proficient in communication,” “persistent in fostering collaboration,” and “valued partner in the work of the organization” (see Figure 1). In contrast, a comparison of individual items for the coworker assessment component showed a statistically significant increase in “proficient in communication” only (see Figure 1).

Five common perceived barrier (see Table 2) and six facilitator themes (see Table 3) emerged from the PBFSCS. The frequency and the relative rank order of the themes shifted slightly between the pre and post course assessments. Narrative quotes to support the themes are summarized for both the self-assessments and coworker assessments.

## DISCUSSION

This study was conducted to help assess the barriers and facilitators to becoming a skilled communicator, while also asking each participant to rate themselves and their coworkers on their ability to support a healthy work environment. Of interest, the self-assessments scored much lower than that of the coworker assessment. This may be attributed to the participants being overly critical or unsure of themselves prior to receiving the curriculum content. The posttest scores suggest that, after the curriculum was

**TABLE 2** Coded Themes for Perceived Barriers to Skilled Communication Listed In Relative Rank Order With Supporting Quotes

Barriers: Pre	Barriers: Post
1. Characteristics of an unhealthy work environment <ul style="list-style-type: none"> <li>• “Intimidation”</li> <li>• “Hierarchy structure”</li> <li>• “Attitudes”</li> <li>• “No respect from MDs/ARNPs”</li> <li>• “Fear of talking to people who are known not to treat people professionally”</li> <li>• [Lack of] “meaningful recognition and authentic leadership”</li> </ul>	1. Characteristics of an unhealthy work environment <ul style="list-style-type: none"> <li>• “Intimidation”</li> <li>• “Hierarchy—the physicians/ARNPs tend to look down on nursing”</li> <li>• “People’s attitudes”</li> <li>• “Lack of respect for our knowledge”</li> <li>• “Lack of teamwork/collaboration”</li> <li>• “Lack of communication between all members of the team”</li> </ul>
2. Ineffective communication skills <ul style="list-style-type: none"> <li>• “Poor listening skills by everyone”</li> <li>• “People not caring if they are being disrespectful”</li> <li>• “Historical interpersonal and interprofessional rivalries”</li> <li>• “Other person not as receptive to what you’re telling them”</li> <li>• “Generational differences”</li> </ul>	2. Lack of education or experience with skilled communication in a healthcare environment <ul style="list-style-type: none"> <li>• “Lack of skilled communication education for all staff and providers”</li> <li>• [Lack of] “self-confidence”</li> <li>• “Inexperience”</li> </ul>
3. Lack of time, distractions, and completing priorities <ul style="list-style-type: none"> <li>• “Time constraints”</li> <li>• “Limited time with [a] continually growing to do list”</li> <li>• “Calling the doctor at time when you are doing other patient care”</li> <li>• “Employees rushing and not listening effectively”</li> </ul>	3. Ineffective communication skills <ul style="list-style-type: none"> <li>• “[Poor] listening skills”</li> <li>• “Some people may not being aware of how they are perceived”</li> <li>• “Prior problematic interactions with the person may make you hesitant to communicate openly”</li> <li>• “Others do not take the time to recognize or seek validation from others communication cues”</li> </ul>
4. Lack of education or experience with skilled communication in a healthcare environment <ul style="list-style-type: none"> <li>• “Not knowing the strategies”</li> <li>• “Inexperience (I am a new nurse)”</li> <li>• “Lack of practice”</li> <li>• “Language barriers”</li> <li>• “Cultural barriers”</li> </ul>	4. Lack of time, distractions and competing priorities <ul style="list-style-type: none"> <li>• “Time constraints”</li> <li>• “Distractions via technology”</li> <li>• “Fast-paced”</li> <li>• “Stressful environment”</li> </ul>
5. Inadequate staffing or skill mix <ul style="list-style-type: none"> <li>• “Inappropriate staffing”</li> <li>• “Stress”</li> <li>• “Urgency”</li> <li>• “Busy assignments = stress = speaking before thinking”</li> </ul>	5. Inadequate staffing or skill mix <ul style="list-style-type: none"> <li>• “Inadequate staffing or skill mix”</li> </ul>

**TABLE 3** Coded Themes for Perceived Facilitators to Skilled Communication Listed in Relative Rank Order With Supporting Quotes

Facilitators: Pre	Facilitators: Post
1. Healthy work environment/following recommendations for skilled communication from AACN <ul style="list-style-type: none"> <li>• “Authentic leadership”</li> <li>• “Teamwork”</li> <li>• “Respectful atmosphere”</li> <li>• “Open communication with others”</li> <li>• “Positive attitude from the physicians”</li> <li>• “Establishing trust”</li> </ul>	1. Healthy work environment/following recommendations for skilled communication from AACN <ul style="list-style-type: none"> <li>• “Being reflective”</li> <li>• “Being mindful of others”</li> <li>• “Being candid”</li> <li>• “Becoming aware of self-deception”</li> <li>• “Be more authentic”</li> <li>• “Meaningful recognition”</li> </ul>
2. Resources and support for team members <ul style="list-style-type: none"> <li>• “Role models who communicate well”</li> <li>• “Support peers”</li> <li>• “More experienced nurses being available”</li> <li>• “Paper reminders on the unit”</li> </ul>	2. Resources and support for team members <ul style="list-style-type: none"> <li>• “Helping fellow nurses out who may not be comfortable speaking”</li> <li>• “Role models for other team members”</li> <li>• “Supportive coworkers”</li> <li>• “Signs around the unit promoting proper communication”</li> </ul>
3. Preparation and organization of a structured communication tool <ul style="list-style-type: none"> <li>• “Gathering as much information as possible prior to beginning so communication is thorough”</li> <li>• “Using structured methods such as SBAR”</li> </ul>	3. Education/ Staff Development <ul style="list-style-type: none"> <li>• “Classes such as this”</li> <li>• “Empowering team members with communication skills”</li> <li>• “Evaluating one’s own communication styles/ techniques”</li> <li>• “Opportunities to practice skilled communication through debriefing session”</li> </ul>
4. Education/staff development <ul style="list-style-type: none"> <li>• “Classes on skilled communication”</li> <li>• “Practice modules”</li> </ul>	4. Organizational culture changes <ul style="list-style-type: none"> <li>• “Quality patient outcomes”</li> <li>• “Increased patient satisfaction”</li> </ul>
5. Organizational culture changes <ul style="list-style-type: none"> <li>• “Organizational culture changes”</li> <li>• “All members of the healthcare team participate in learning the communication [strategies for skilled communication]”</li> </ul>	5. Staff empowerment and patient advocacy <ul style="list-style-type: none"> <li>• “Not being afraid to wake up a physician”</li> <li>• “Understanding that we are here for the patients”</li> </ul>
6. Staff empowerment and patient advocacy <ul style="list-style-type: none"> <li>• “Confidence in the work that you do”</li> <li>• “Knowing that is the right thing to do”</li> </ul>	6. Preparation and organization of a structured communication tool <ul style="list-style-type: none"> <li>• “Using tools like SBAR”</li> </ul>
<i>Note.</i> AACN = American Association of Critical Care Nurses; SBAR = Situation, Background, Assessment, Recommendation.	

presented, the participants had a better understanding of what each skill set entailed and their scores improved in all areas, with significant increases in the following areas: proficient in communication as in my job skills, being persistent in fostering collaboration with others, and being a valued partner in the work of the organization. The coworker assessment also showed an increase in being proficient in communication as in my job skills domain. The data suggest that, after the course, the participants were more aware of the five critical elements of skilled communication as described by the AACN (2016). In addition, the nurse participants described a clear association between skilled communication, use of a standardized reporting tool such as SBAR (situation, background, assessment, recommendation), and patient safety and quality after attending the course.

The narrative quotes provided by the participants before and after the course suggest that they recognized the need

for additional education related to skilled communication to promote a healthy work environment. Participants reported “lack of skilled communication education for all staff and providers” as a barrier and “classes on skilled communication” as a facilitator to promoting a healthy work environment. The direct quotes suggest that the participants had a basic understanding of the importance of skilled communication to promote patient safety and quality prior to attending the course and were aware of common barriers (“poor listening skills by everybody,” “busy assignments = stress = speaking before thinking,” “people not caring if they are being disrespectful”) and facilitators (“respectful atmosphere,” “open communication with others”) to effective communication and a healthy work environment. After attending the course, participants were able to recall the AACN’s five factors of a skilled communicator, suggesting they had retained the critical concepts discussed in the course.

The nurse participants in this study described the need for “authentic leadership,” “respectful atmosphere,” “open communication with others,” and “teamwork” as recommendations to support a healthy work environment. The quotes in this sample are consistent with the literature on healthy work environment that suggest that nurses need to know that they are valued partners in the organization and that the organizational culture and leadership will support their physical and emotional needs (Blake, 2016). The need for authentic leadership, meaningful recognition, communication, collaboration, and safe staffing was described by the nurse participants as critical to maintain a healthy work environment (Blake, 2016; Huddleston, & Gray, 2016). Consistent with Blake (2015), the nurse participants in this study also reported that “hierarchical structure” and “inadequate staffing or skill mix” can be barriers to skilled communication and a healthy work environment (Manojlovich, 2013).

## LIMITATIONS

The study was conducted in only one unit, and the sample consisted of a convenience sample of 26 nurses (18 being nurses with 0–5 years of clinical experience). No advanced practice providers or physicians chose to participate despite multiple invitations to be part of the study. Therefore, the findings cannot be generalizable. In addition, the categories included in the demographic tool were not mutually exclusive (0–5, 5–10); therefore, some of the participants may have incorrectly assigned themselves to a representative group. Finally, the PBFSCS was developed specifically for use in this study and did not have any prior psychometric testing to establish the validity and reliability of the tool, which presents a limitation to the measurement of the perceived barriers and facilitators to skilled communication in this study sample.

## CONCLUSION

Because of the critical nature of skilled communication to promote a healthy work environment, this course may be further customized and implemented as part of general orientation to reach a larger target audience. However, these findings must be applied with caution. The results suggest that the implementation of a targeted course could potentially impact the perceptions of a sample of nurses working on a Hem/Onc/BMT unit regarding their own competence related to skilled communication to promote a healthy work environment. We recommend a future larger study with ideal interdisciplinary medical and nursing team participants to confirm these preliminary findings and to improve generalizability. Patient safety and high-quality care depend

on the success of continuing to develop these skills toward a healthy work environment.

## References

- American Association of Critical Care Nurses. (2016). AACN standards for establishing and sustaining healthy work environments: A journey to excellence. Retrieved from <https://www.aacn.org/WD/HWE/Docs/HWEstandards.pdf>
- Blake, N. (2015). The healthy work environment standards: Ten years later. *AACN Advanced Critical Care*, 26(2), 97–98. doi:10.1097/NCL.0000000000000078
- Blake, N. (2016). Programs that support a healthy work environment. *AACN Advanced Critical Care*, 27(3), 266–268. doi:10.4037/aacnacc2016802
- Blake, N., Leach, L. S., Robbins, W., Pike, N., & Needleman, J. (2013). Healthy work environments and staff nurse retention: The relationship between communication, collaboration, and leadership in the pediatric intensive care unit. *Nursing Administration Quarterly*, 37(4), 356–370. doi:10.1097/NAQ.0b013e3182a2fa47
- Blosky, M. A., & Spegman, A. (2015). Let's talk about it: Communication and a healthy work environment. *Nursing Management*, 46(6), 32–38. doi:10.1097/01.NUMA.0000465398.67041.58
- Brunges, M., & Foley-Brinza, C. (2014). Projects for increasing job satisfaction and creating a healthy work environment. *AORN Journal*, 100(6), 670–681. doi:10.1016/j.aorn.2014.01.029
- Hartung, S. Q., & Miller, M. (2013). Communication and the healthy work environment. *The Journal of Nursing Administration*, 43(5), 266–273. doi:10.1097/NNA.0b013e3182eeb3c
- Huddleston, P., & Gray, J. (2016). Describing nurse leaders' and direct care nurses' perceptions of a healthy work environment in acute care settings, Part 2. *The Journal of Nursing Administration*, 46(9), 462–467. doi:10.1097/NNA.000000000000376
- Institute of Medicine. (2004). *Keeping patients safe: Transforming the work environment of nurses*. Washington, DC: National Academics Press.
- Kupperschmidt, B., Kientz, E., Ward, J., & Reinholz, B. (2010). A healthy work environment: It begins with you. *Online Journal of Issues in Nursing*, 15(1), 1–11. doi:10.3912/OJIN.Vol15No01Mam03
- Manojlovich, M. (2013). Reframing communication with physicians as sensemaking: Moving the conversation along. *Journal of Nursing Care Quality*, 28(4), 295–303. doi:10.1097/NCQ.0b013e31828b1c6d
- Mays, M. Z., Hrabec, D. P., & Stevens, C. J. (2011). Reliability and validity of an instrument assessing nurses' attitudes about healthy work environments in hospitals. *Journal of Nursing Management*, 19, 18–26. doi:10.1111/j.1365-2834.2010.01135.x
- Missi, P. D. (2016). Enhancing nurse-physician communication and collaboration. Graduate theses, dissertations, and capstones, Bellarmine University, Paper 27.
- Shirley, M. R. (2017). Leadership practices for healthy work environments. *Nursing Management*, 43–50. doi:10.1097/01.NUMA.0000515796.79720.e6
- The Joint Commission. (2017a). *Sentinel event alert: Inadequate hand-off communication*. Retrieved from [https://www.jointcommission.org/assets/1/18/SEA\\_58\\_Hand\\_off\\_Comms\\_9\\_6\\_17\\_FINAL\\_\(1\).pdf](https://www.jointcommission.org/assets/1/18/SEA_58_Hand_off_Comms_9_6_17_FINAL_(1).pdf)
- The Joint Commission. (2017b). *The art of handoff communication*. Retrieved from [https://www.jointcommission.org/quality\\_reliability\\_leadership/the\\_art\\_of\\_handoff\\_communication/](https://www.jointcommission.org/quality_reliability_leadership/the_art_of_handoff_communication/)
- The Joint Commission. (2017c). *A guide to the joint commission's communication goal: Improving the effectiveness of communication among caregivers*. Retrieved from <http://cloud.spok.com/EB-AMER-Joint-Commission-Goal-2.pdf>

For 21 additional continuing education articles related to communication, go to [NursingCenter.com](http://NursingCenter.com) \CE.