Role-Play Using SBAR Technique to Improve Observed Communication Skills in Senior Nursing Students

Karen S. Kesten, DNP, APRN, CCNS

ABSTRACT

Patients in the care of clinically expert professionals suffer medical errors with alarming frequency. The Joint Commission’s National Patient Safety Goals strives to improve the effectiveness of communication among caregivers by recommending the implementation of a standardized tool known as SBAR (Situation, Background, Assessment, and Recommendation). This experimental study evaluated data from undergraduate nursing students (N = 115) on their performance using a standardized communication tool SBAR. The mean performance scores of the didactic plus role-play students were significantly higher than those who had didactic instruction alone (t = –2.6, p = 0.005). Findings suggest role-play may have a place in teaching communication skills in nursing schools as well as continuing education and training in hospitals and other health care settings. Interdisciplinary communication training may provide even more effective learning. The link between effective communication and improved patient outcomes also should be studied.

Skilled communication and respectful interaction among the health care team members are critical to achieve optimization of quality patient care outcomes. Accurate communication, particularly during clinical handoffs, is the focus of international, national, and local initiatives. Organizations such as the World Health Organization, World Alliance for Patient Safety, Institute for Healthcare Improvement, National Patient Safety Agency, Agency for Healthcare Research and Quality, and Australian Commission for Safety and Quality in Health Care have identified skilled communication during clinical handoffs as a priority.

In more than 2,900 sentinel events occurring in the United States, reported between 1995 and 2005, more than two thirds reported miscommunication as the root cause in their occurrence (Joint Commission on Accreditation of Healthcare Organizations, 2006b). Sentinel events are defined as unexpected occurrences involving death or serious physical or psychological injury (Joint Commission on Accreditation of Healthcare Organizations, 2006b). Such events are called sentinel because they signal the need for immediate investigation and response. Ineffective communication between nurses and physicians has been linked to medication errors, patient injuries, and patient deaths (Gurses & Carayon, 2007; Knaus, Wagner, Zimmerman, & Draper, 1993; Manojlovich & DeCicco, 2007). From 2004 to 2005, communication failures were a contributing factor in 25% to 41% of sentinel events in Australia (Australian Institute of Health and Welfare & the Australian Commission on Safety and Quality in Health Care, 2007; Wakefield, 2007).

In 2001, the Institute of Medicine (IOM) called for reform in communication norms, team performance, and risk assessment processes (IOM, 2001). Health care organizations worldwide must now implement a standardized approach to handoff communications (Joint Commission on Accreditation of Healthcare Organizations, 2006a). Both the IOM and the Joint Commission endorse the application of a teamwork model developed by the U.S. military and the Federal Aviation Administration to provide clear, direct, unequivocal team communication (Mahlmeister, 2005). This teamwork model uses a structured communication tool called SBAR (Situation, Background, Assessment, and Recommendation) defined in Table 1. The SBAR technique
ROLE-PLAY USING SBAR TECHNIQUE

<table>
<thead>
<tr>
<th>Component</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Situation</td>
<td>What is going on with the patient?</td>
</tr>
<tr>
<td>Background</td>
<td>What are the clinical facts surrounding the problem?</td>
</tr>
<tr>
<td>Assessment</td>
<td>What do I think the problem is?</td>
</tr>
<tr>
<td>Recommendation</td>
<td>What should be done to correct the problem?</td>
</tr>
</tbody>
</table>


provides a framework for communication among members of the health care team about a patient’s condition during an urgent situation when information must be transmitted rapidly and concisely. The Joint Commission further recommends education and training, communication tools, discussion forums, and interventional strategies to improve interdisciplinary communication (Rosenstein & O’Daniel, 2008).

Recently, the Agency for Healthcare Research and Quality (n.d.) has recommended a Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS) approach to improving patient safety in organizations. This teamwork system is designed to improve communication and teamwork skills among health care professionals. TeamSTEPPS is an evidence-based training curriculum used to integrate teamwork principles into health care systems. Similar to the U.S. Department of Defense’s Patient Safety program, TeamSTEPPS uses SBAR as a communication tool as one component of the training curriculum.

To comply with the mandate issued by the IOM (2001), facilities were rapidly attempting to disseminate the use of SBAR, without adequate evidence of best practice for teaching strategies using the skilled communication technique. Until recently, health care facilities worldwide have been promoting tools such as SBAR to be widely used to increase effectiveness of communication with no evidence-based method of teaching skilled communication in health care documented (McCausley & Irwin, 2006). Effective strategies for teaching interprofessional communication need to be systematically evaluated and are urgently needed to advance the current patient safety and quality care agenda. This study was designed to address this gap in the literature regarding specific teaching strategies for skilled communication.

The purposes of this research were:
- To determine whether the type of skilled communication instruction (didactic versus didactic plus role-play) influences nursing students’ knowledge of skilled communication.
- To determine whether the type of skilled communication instruction influences nursing students’ skilled communication performance in simulated experiences.

The study was conducted at a private university-based school of nursing that provides undergraduate and graduate nursing education in a major metropolitan city in the United States. The target population was senior nursing students in traditional and second-degree nursing programs.

LITERATURE REVIEW

A literature review was conducted to evaluate interprofessional communication training, use of the SBAR tool, and the educational strategies used to offer communication training for nurses. The literature was supportive of the need for interprofessional communication training to improve patient safety.

Background exploration on the need for interprofessional team communication revealed teamwork that reduces error and improves patient safety is grounded in communication that is timely, accurate, complete, and unambiguous (Dixon, Larson, & Zabari, 2006; Guise & Lowe, 2006). Effective team communication is open, continuous, multidirectional, nonhierarchical, collegial, respectful, and direct (IOM, 2001). All members of the team have an obligation to speak up as well as an obligation to listen (Mahlmeister, 2005). This obligation is especially true in acute or critical situations requiring an urgent or emergent response to a patient need.

The literature reveals that the SBAR tool was developed in an attempt to standardize communication between individuals and has been adopted by health care providers (Schneider, 2005). Effective team communication methods and tools from high-reliability industries are potential sources of innovation for health care (Helmreich, 2000; Leonard, Graham, & Bonacum, 2004; Markley & Winbery, 2008). Standardized communication tools from the aviation industry such as SBAR use assertive communication, critical language, and situational awareness that can greatly enhance safety by setting expectations for what is communicated and how team communication is effective (Harris, Treanor, & Salisbury, 2006; Leonard et al., 2004). The SBAR communication technique provides a standardized framework representing a hybrid of medical and nursing communication styles intended to enhance nurse-physician communication.

In the health care arena, Kaiser Permanente of Colorado was one of the first to formally adopt SBAR and to develop a worksheet that outlines SBAR format and guidelines (Institute for Healthcare Improvement, n.d.). SBAR allows for an easy and focused way to set expectations for what will be communicated and how among members of the team, which is essential for developing teamwork and fostering a culture of patient safety (Kaiser Permanente, n.d.). The SBAR tool can be used as a situational briefing during pre-procedures, during handoffs, or at any time there is an unexpected change in the patient’s care (Haig, Sutton, & Whittington, 2006). Since 2004, successful implementation of the SBAR technique has been demonstrated in high-risk settings such as intensive care, emergency departments, and operating rooms, with improvement in patient and staff satisfaction, clinical outcomes, team communication, and patient safety (Leonard et al., 2004; McFerran, Nunes, Pucci, & Zuniga, 2005).

Findings from a study conducted in Canada suggest that staff found the use of the adapted SBAR tool in the outpatient setting helpful in both individual and team communications, which ultimately affected perceived changes in the safety culture of...
the study team (Velji et al., 2008). In another study, the use of SBAR technique to ensure effective communication among health care workers reduced the number of sentinel events from 89.9 per 1,000 patient days to 39.96 per 1,000 patient days per year (Haig et al., 2006). Haig et al. (2006) also found improved medication reconciliation at patient admission from 72% to 88% and at discharge from 53% to 89% after implementing effective communication among health care professionals using SBAR. In addition, Haig et al. (2006) found SBAR is an effective technique that has been shown to improve interdisciplinary satisfaction in communication. Limitations of the SBAR tool involve the need for education and training for a multidisciplinary staff and the difficulty some health care professionals may have with assertive communication, for fear of being wrong (Leonard et al., 2004).

The application of SBAR communication to the health care environment is a promising concept, but the evidence required for development of effective team training interventions is currently being established (Thomas & Helmreich, 2002). Until the advent of SBAR and TeamSTEPPS for application in health care, rarely had a standardized communication tool been used when teaching interprofessional communication. One pilot study on SBAR and nurse-physician communication tested an education intervention and recommended simulations of critical situations with emphasis on effective communication and conflict resolution training (Hamilton, Gemeinhardt, Mancuso, Sahlin, & Ivy, 2006; Woodhall, Vertacnik, & McLaughlin, 2008).

In the emergency department, Morey et al. (2002) found that after implementation of multiple medical team training sessions, improved team behaviors were noted, staff attitudes toward teamwork improved, and clinical errors were reduced. Labor and delivery units found that after implementation of multiple teamwork strategies and tools, a 50% reduction in the Weighted Adverse Outcome Score was observed (Mann, Marcus, & Sachs, 2006). In addition, a 50% decrease in the Severity Index, which measures the average severity of each delivery with an adverse event, was reported after team training (Mann et al., 2006). Intensive care units implemented a "patient daily goals" form to facilitate staff communication and found a 50% decrease in mean length of stay in the intensive care unit from 2.2 to 1.1 days (Pronovost et al., 2003).

After implementation of a preoperative briefing, operating rooms reported increased communication, increased administration of properly timed prophylactic antibiotics prior to incision from 84% to 95%, and increased preoperative deep vein thrombosis prophylaxis prior to induction from 92% to 100% (Awad et al., 2005). Interdisciplinary team training involving communication techniques resulted in a 16% reduction in nursing turnover rate and a 19% increase in operating room employee satisfaction (Leonard et al., 2004). The evidence is mounting to support adopting teamwork strategies for significant improvement in patient outcomes and improvement in work satisfaction.

Further evidence exists in case study and anecdotal accounts in the literature. Ascano-Martin (2008) implemented role-play of shift report using a standardized SBAR communication technique with senior nursing students in postclinical conference and reported an increase in self-confidence in giving report. In addition, the students’ active participation during the role-play sessions stimulated higher level learning and critical thinking ability (Ascano-Martin, 2008).

Communication among health care professionals has not been effectively taught in the past, and if it was taught, a consistent approach likely was not used. The literature on teaching nurses skilled communication revealed a variety of instructional methods, variable methods for observation of communication behavior, diverse evaluation tools, and few studies that specifically examined nurse communication skills. Of the few research studies available, several showed a positive relationship between communication training and effective communication skills acquired by nurses. Several studies used a combination of didactic and interactive instructional methods, especially role-play and skill practice to teach the content. Positive effects on nurses’ communication knowledge and attitudes were shown in studies using a combination of didactic and interactive strategies (Boyle & Kochinda, 2004; Velji et al., 2008). Interactive strategies such as role-play exercises appear to be an effective teaching method to improve communication skills for nurses.

Because there is little evidence to support a particular teaching strategy to teach SBAR, further studies are warranted using a randomized, controlled, experimental design. Studies that examine educational best practices in skill training to optimize the nurse-provider communication by using a standardized communication technique are needed.

METHOD

Sample
This study was approved by the university’s institutional ethics review board. This experimental study was conducted using a convenience sample and a randomly assigned experimental group (didactic plus role-play) and a control group (didactic only) via the use of a table of random numbers. The first research question examined changes in knowledge and used a pretest-posttest design. The second research question examined differences in performance between the experimental and the control groups, and used a posttest only control group design. A convenience sample of traditional and second-degree senior nursing students receiving the same curriculum was drawn. A total of 156 students were invited to participate in this study. Of these, 115 students voluntarily agreed to participate. One hundred four students participated in the Communication Knowledge Pretest-Posttest, and 109 students participated in the SBAR Observation. The attrition rate was 0.9%. Reasons for the attrition included illness, death in the family, and failure to appear for the appointed data collection time.

Procedures
Two research assistants who were trained for this study obtained informed and voluntary consent from the study participants outside of class time. Senior nursing students were recruited for the study by the research assistants, who had no teaching relationship to the students. All appropriate steps were taken to ensure that there was no coercion to participate in the study. The entire convenience sample received didactic instruction mid-semester with the knowledge pretest administered...
prior to instruction and the knowledge posttest administered to the entire group at the completion of the semester.

The skilled communication education module was developed to be presented to nursing students in one group for the didactic portion. Content validity was established by consultation with four expert faculty members who teach communication skills to nursing students. A 1-hour presentation on the theory and science known to improve communication to prevent errors in health care and an introduction to the SBAR method of communication took place in the classroom. Instruction was delivered to the students via lecture with PowerPoint® slides and included didactic content on the SBAR steps for the skilled communication dialogue between the nurse and the health care provider. An SBAR Skilled Communication handout was provided to the nursing students to organize this activity. This handout labeled the four SBAR steps of Situation, Background, Assessment, and Recommendation, and provided a fill-in blank next to each subtopic. Table 2 describes the content outline of the communication instruction.

The intervention group received role-play instruction in addition to the didactic instruction on skilled communication. The role-play instruction consisted of a 40-minute role-play exercise conducted by the communication expert faculty. The objective for the role-play exercise using SBAR was for students to demonstrate appropriate use of the SBAR tool when given a case scenario. The case scenario consisted of a brief one paragraph description of the clinical patient situation. Students needed to organize the content into an SBAR format. Following demonstration by faculty of the role-play exercise, the intervention group, divided into pairs, received four case scenario role-play exercises with instructions to communicate using SBAR. Each student participated in four role-play scenarios. Time was devoted to role-play practice, allowing 20 minutes per student pair. Students were observed by faculty members during the role-play exercise. An additional 20 minutes were devoted to student demonstration of role-play and debriefing of role-play interactions and behaviors with faculty. Table 3 provides an example of a scenario script for the ideal role-play demonstration.

All of the students participated in the simulation exercise at the completion of the semester, and the research assistants observed the students’ communication performance. All of the students had two previous simulation experiences in their sophomore and junior years with nonurgent case simulations. The research team developed two clinical simulations, each involving a patient with a complex diagnosis who developed a medical emergency. The simulations were developed to incorporate theory content and clinical content from the students’ practicum in emergency and critical care units. Each participant was given a report on the patient and instructed to assess the patient and to prioritize care as if in an actual emergency department. Students were instructed on how to reach a provider should they have an urgent question or request. A faculty member played the role of the care provider receiving the SBAR report and provided orders based on the information communicated. Every simulation exercise was videotaped for review on DVD by the research assistants. After each simulation exercise, students participated in routine debriefing during which faculty guided a reflective discussion on the student performance.

**Instruments**

Demographic data including gender, age, English as a second language, program of study, and cohort were collected from participants at the time of pretesting. There were no instruments in the literature to measure skilled communication knowledge of SBAR. Therefore, communication knowledge of SBAR was assessed by the SBAR Knowledge Pretest-Posttest instrument, which was developed and piloted by the author. Content validity
was established, and faculty experts reviewed the testing instrument and made recommendations for revision. Review of the objectives and content outline took place by the expert reviewers.

Communication performance was measured by observing the behavior of the nursing students for compliance with the SBAR method of communication when contacting a provider with a patient concern. Students were given a scenario in the simulation laboratory that required an urgent response and contact of a provider. Because there were no instruments in the literature to measure the observed behavior using SBAR, the SBAR Observed Behavior Checklist Tool was created by the author and was pilot-tested to inform the current study. Revisions of the SBAR Observed Behavior Checklist Tool were made based on the results of the pilot and the expert reviewers’ recommendations. Interrater reliability on the observation tool was established through the use of two independent raters. Forty students were observed by both reviewers. Interrater reliability was established using Cohen’s Kappa (Kappa = 0.857, \( p < 0.001 \)) to measure the agreement between the evaluations of the two reviewers when both were rating the same event. The researcher trained the reviewers in the use of the SBAR Observed Behavior Checklist Tool through demonstration in the simulation laboratory and review of the videotaped DVD recordings.

Data Analysis

The intervention and control groups were compared based on the demographic data: gender, age, English as a second language, program of study, and cohort. The purpose of this comparison was to establish like groups. A \( t \) test of the means was used. To answer the first research question, Does type of instruction influence communication knowledge?, scores were calculated for each participant on the knowledge pretest and posttest. Differences were tested using a dependent \( t \) test to determine whether there was a significant difference. To answer the second research question, Does type of instruction improve performance?, differences in observed use of SBAR components were examined by type of instruction. A sequence of chi-square analyses was completed based on responses to the five yes/no items on the nonparametric SBAR Observed Behavior Checklist. Chi square was used to evaluate proportion differences between the control (didactic only) group and intervention (didactic plus role-play) group total scores on first observation data. Chi-square analysis was used to test for differences in the individual items (\( N = 5 \)) that comprise the SBAR Observed Behavior Checklist Tool as well as the total scores.

### RESULTS

The sample of 115 senior nursing students consisted of 49.6% second-degree students (\( n = 57 \)) and 50.4% traditional baccalaureate nursing students (\( n = 58 \)). Participants ranged in age from 20 to 48, with an average age of 24. The majority of the participants were women (91.3%), with 13% using English as a second language. The intervention and control groups were not significantly different in age, gender, English as a second language, type of program (traditional or second-degree), or cohort (April versus December 2008).

#### Comparison of Knowledge by Type of Instruction

The knowledge means and change in knowledge scores for all of the students and by treatment group, age, gender, English as a second language, program of study, and cohort in time (April versus December 2008) are compared in Table 4. For all of the students, the mean score on the Skilled Communication Knowledge increased from 62.1 (\( SD = 14.5 \)) to 85.2 (\( SD = 10.5 \)). The mean change in knowledge (\( M = 23.1, SD = 16.1 \)) reflects a statistically significant difference as measured by paired sample \( t \) test analysis (\( t = 14.5, p < 0.001 \)). This finding reflects a large effect size of \(-1.59\), as was anticipated with the communication knowledge research aim. This finding confirms that all of the students demonstrated a significant change in knowledge after receiving instruction on the SBAR communication. To determine which instructional method of didactic instruction alone or didactic instruction plus role-play demonstrated a greater change in knowledge, an independent \( t \) test found no statistically significant difference between the groups. Both groups demonstrated a significant gain in communication knowledge from the instruction they received.

#### Comparison of Total SBAR Communication Performance Score: First Observation

The primary focus of this study was on observable behavioral performance of skilled communication using the SBAR tool. Students were given two opportunities to demonstrate SBAR in

<table>
<thead>
<tr>
<th>SBAR Component</th>
<th>Script</th>
</tr>
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<tbody>
<tr>
<td>Situation</td>
<td>Mrs. J is a 65-year-old woman with end-stage renal disease and a critical potassium level of 6.9 mEq/L.</td>
</tr>
<tr>
<td>Background</td>
<td>Mrs. J has a medical history of hypertension and was admitted yesterday for abdominal aortic aneurysm repair. She missed dialysis 2 days ago. She has no known allergies and is a full code status.</td>
</tr>
<tr>
<td>Assessment</td>
<td>The patient currently has no apparent distress, and her vital signs are stable. The ECG shows tall tent-like “T” waves.</td>
</tr>
<tr>
<td>Recommendation</td>
<td>I recommend that we start stat dialysis because the ECG shows signs of hyperkalemia. What medications would you like me to give to treat her hyperkalemia? The patient needs emergent dialysis.</td>
</tr>
</tbody>
</table>

Note: ECG = electrocardiogram; SBAR = Situation, Background, Assessment, and Recommendation.
the simulated experience. To this end, the first observation data only were used to assess communication performance. First observation data were deemed untainted by previous exposure during the simulation or by previous attempts. The observation components are included and labeled in Table 5. The summed total on the five components of performance resulted in scores ranging from 0 to 5. The control group \((n = 55)\) demonstrated a mean first observation score of 3.6 \((SD = 1.1)\), whereas the intervention group \((n = 51)\) demonstrated a mean first observation score of 4.1 \((SD = 0.9)\). A one-tailed \(t\) test for unequal variances was used to address the second research question and found this to be a statistically highly significant difference \((t = –2.6, p = 0.005)\). This finding represented a moderate effect size of 0.56. In support of the research hypothesis, students who received role-play instruction in addition to didactic instruction performed significantly better on the skilled communication first observed behavior than those students who received didactic instruction alone.

Overall, compliance with SBAR was defined as a total score \(\geq 4\) on first observation. In the control group (didactic alone), 23 of 55 participants \(42\%\) scored \(\geq 4\) on first observation. In the intervention group (role-play plus didactic), 39 of 54 participants \(72\%\) scored \(\geq 4\) on first observation. These results demonstrate a statistically significant difference between the groups \((\chi^2 = 12.8, p = 0.01)\). As summarized in Table 5, chi-square analysis demonstrated no statistically significant difference in compliance with items 1, 2, 4, and 5 between the control and intervention groups. Observed behavior 3 demonstrated that the intervention group \((n = 35, 64.8\%)\) performed significantly better \((\chi^2 = 5.79, p = 0.02)\) than the control group \((n = 23, 41.8\%)\). This behavior necessitated that students identify the treatment to date regarding the patient they were calling about. It is interesting to note that this treatment information was not stressed in the didactic portion of the training for either group but that the role-play group performed better on demonstration of this component of skilled communication.

**DISCUSSION**

The results of this study demonstrate that nursing students’ knowledge of skilled communication increases as a result of didactic instruction with use of a standardized commu-

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**TABLE 4**

Comparison of Communication Knowledge by Treatment Group and Demographic Data

<table>
<thead>
<tr>
<th></th>
<th>Pretest ((N = 104))</th>
<th>Posttest ((N = 104))</th>
<th>Change in Knowledge ((N = 104))</th>
<th>Statistical Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean ((SD))</td>
<td>Mean ((SD))</td>
<td>Mean ((SD))</td>
<td></td>
</tr>
<tr>
<td>All students ((n = 104))</td>
<td>62.1 (14.5)</td>
<td>85.2 (10.5)</td>
<td>23.1 (16.1)</td>
<td>(t = 14.5 (p &lt; 0.001))</td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control(^a) ((n = 53))</td>
<td>60.4 (15.9)</td>
<td>84.7 (11.5)</td>
<td>24.3 (17.2)</td>
<td>(t^b = 0.8)</td>
</tr>
<tr>
<td>Intervention(^c) ((n = 51))</td>
<td>63.9 (12.8)</td>
<td>85.7 (9.4)</td>
<td>21.8 (15.1)</td>
<td>(p = 0.42)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(&lt; 25 ((n = 80))</td>
<td>65.8 (12.3)</td>
<td>86.5 (9.8)</td>
<td>20.8 (14.5)</td>
<td>(t = 2.8)</td>
</tr>
<tr>
<td>(\geq 26 ((n = 24))</td>
<td>50 (15)</td>
<td>80.8 (11.8)</td>
<td>30.8 (19.1)</td>
<td>(p = 0.007)</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female ((n = 95))</td>
<td>63.5 (14.2)</td>
<td>85.8 (10.5)</td>
<td>22.3 (16.2)</td>
<td>(t = 14)</td>
</tr>
<tr>
<td>Male ((n = 9))</td>
<td>47.8 (9.7)</td>
<td>78.9 (9.3)</td>
<td>31.1 (13.6)</td>
<td>(p &lt; 0.001)</td>
</tr>
<tr>
<td>English as second language</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes ((n = 12))</td>
<td>51.3 (9.4)</td>
<td>83.3 (10.7)</td>
<td>32 (16.1)</td>
<td>(t = 14.6)</td>
</tr>
<tr>
<td>No ((n = 92))</td>
<td>63.5 (14.6)</td>
<td>85.4 (10.5)</td>
<td>21.9 (18)</td>
<td>(p &lt; 0.001)</td>
</tr>
<tr>
<td>Program</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Traditional ((n = 52))</td>
<td>66.9 (13.5)</td>
<td>87.5 (10.3)</td>
<td>20.6 (15.9)</td>
<td>(t = 14.3)</td>
</tr>
<tr>
<td>Second degree ((n = 52))</td>
<td>57.3 (14)</td>
<td>82.9 (10.4)</td>
<td>25.6 (16.1)</td>
<td>(p &lt; 0.001)</td>
</tr>
<tr>
<td>Cohort</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>April 2008 ((n = 49))</td>
<td>61.6 (16.1)</td>
<td>86.9 (10.7)</td>
<td>25.3 (18)</td>
<td>(t = 14.2)</td>
</tr>
<tr>
<td>December 2008 ((n = 55))</td>
<td>62.6 (13.1)</td>
<td>83.6 (10.3)</td>
<td>21.1 (14.1)</td>
<td>(p &lt; 0.001)</td>
</tr>
</tbody>
</table>

\(^a\) Didactic instruction only.

\(^b\) Independent \(t\) test.

\(^c\) Didactic instruction + role-play.
communication technique. Several studies reported improved communication after skilled communication training using didactic instruction, but none of the studies used SBAR (Berkenstadt et al., 2008; Boone, King, Gresham, Wahl, & Suh, 2008; Boyle & Kochindah, 2004; Brown, Boles, Mullooly, & Levinson, 1999; Fallowsfield, Saul, & Gilligan, et al., 2001; Faulkner, 1992; Heaven & Maguire, 1996; Krautscheid, 2008; Paxton, Rhodes, & Crooks, 1988; Razavi et al., 1993, 2000, 2002; Schlundt, Quesenberry, Pichert, Loren, & Boswell, 1994; Whitson et al., 2008).

This study demonstrates a change in knowledge that was significant in all of the students regardless of age, gender, program of study, English as second language, or cohort. However, older students, defined as those older than age 25, demonstrated significantly greater change in knowledge than younger students, with younger students having higher pretest scores. Older students demonstrated greater gain in knowledge of the skilled communication technique; this may be explained by the adult learning theory that adult learners retain knowledge that they can use and apply immediately (Knowles, 1984). Gender differences at baseline also were observed. Although pretest scores in men were lower than in women, men showed significantly greater change in knowledge than women. Due to the small sample of male students, this finding may be attributed to an artifact of group size.

Although students reported previous knowledge of SBAR technique, few had actually ever practiced using it. Communicating succinctly with pertinent information in an acute situation requires forethought and practice using a tool such as SBAR. Students who received role-play instruction in addition to didactic instruction performed significantly better on the skilled communication first observation than students who received didactic instruction alone. This finding is the most interesting aspect of the study as it confirms the relationship between role-play instruction and performance. The critical nursing action of knowing when, what, and how to communicate regarding an urgent patient concern to a provider must not be arbitrary.

This study supports evidence that exists in case study and anecdotal accounts in the literature. Ascano-Martin (2008) implemented role-play of shift report using a standardized SBAR communication technique with senior nursing students in post-clinical conference and found an increase in self-confidence in giving report. In addition, the students’ active participation during the role-play sessions stimulated higher level learning and critical thinking ability (Ascano-Martin, 2008). Case study reports in perioperative settings demonstrate how the use of SBAR as a standardized approach to handoff communication helps minimize risks to patient safety (Amato-Vealy, Barba, & Vealy, 2008).

The nursing department at Providence St. Vincent Medical Center in Portland, Oregon, realized increased staff and physician competence with team communications after initiating didactic presentations and trigger tools to reinforce the use of SBAR communication (Dixon et al., 2006). The use of role-play instruction and the integration of practical scenarios into the course curriculum facilitated student learning and retention of SBAR communication skills.
play was recommended as an instructional method. In addition, Dixon et al. (2006) recommended that staff practice organizing and delivering information in a structured format, that simulation-based team training be offered to afford practice, and that SBAR be embedded in practice guidelines, policies, and procedures. Application of role-play instruction of SBAR in home health settings was demonstrated at Aria Home Health in Dallas, Texas, where the SBAR tool was implemented to formalize nurse-physician communication processes by educating the staff regularly, providing role-play opportunities, and allowing the staff to practice (Markley & Winbery, 2008). This research study demonstrates the effect of role-play instructional methodology to teach nurses skilled communication using SBAR.

Anecdotal reports of successful use of SBAR as a standardized communication technique for nurses and providers are emerging throughout the literature. These include editorials in case management journals; information links in skin and wound care journals; and reports in emergency, perioperative, home health nursing, and pediatric journals (Pope, Rodzien, & Spross, 2008; Powell, 2007; Sibbald & Ayello, 2007; Streitenberger, Breen-Reid, & Harris, 2006). This research study provides nursing faculty with information regarding the importance of teaching skilled communication using a standardized communication tool to nursing students as well as identifying effective instructional methods to improve outcomes. This research study addresses the gap that exists in the literature regarding the best method to teach skilled communication to nurses and the best method to produce observable change in communication behavior. This study demonstrates that in addition to didactic instruction, participating in a role-play exercise using a standardized communication technique such as SBAR may improve communication performance.

LIMITATIONS AND RECOMMENDATIONS

Limitations of the study relate to the setting, sample, and design. Possible prior exposure of students to SBAR in the clinical arena may have influenced performance, irrespective of the teaching approach. Although there was representation of baccalaureate students and second-degree nursing students, generalizing to other student populations or nurses working in organizations may not be possible. Further limitations relate to the scenarios that were developed for this study as there were no existing tools. Administering the posttest to students once at the end of the semester a few weeks after instruction rather than testing at several subsequent intervals is another limitation of the study. Future studies should use a broader student and licensed population, multiple reviewers, and multiple scenarios. Interdisciplinary training would be a good approach.

Health care facilities across the nation are attempting to implement SBAR as a skilled communication tool. Knowledge of an effective instructional method to teach skilled communication will assist educators in implementing SBAR education in health care facilities and schools of nursing. The evidence that didactic and role-play instruction of the skilled communication tool SBAR improves the observed use of SBAR by nursing students will encourage disciplines within and outside of nursing to implement the teaching method.

CONCLUSION

Results from this project provide evidence-based outcomes that may influence practice for in-service education, continuing education, facility orientation, interdisciplinary education, and nursing curriculum. This project builds the evidence toward improving communication training of nurses and providers, which may ultimately improve patient outcomes. Future research conducted in an interdisciplinary setting using role-play to teach skilled communication is recommended. Instructing all health care team members as well as the provider, as the receiver of this communication, on what to expect when nurses and team members use the SBAR technique can only enhance communication. If communication between nurses and health care providers is improved, the implications for improving patient outcomes and patient safety have great potential. Next steps include using this instructional method to teach international nurses skilled communication. Future research investigating the specific impact of SBAR communication on patient outcomes, medication errors, and sentinel events is recommended.

REFERENCES


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