

Eastern Kentucky University

Encompass

Doctor of Nursing Practice Capstone Projects

Baccalaureate and Graduate Nursing

2018

Using an On-line Educational Module to Increase Nurses' Conviction and Confidence in the Use of the Teach-Back Method for Discharge Instructions

Allison S. Morrison

Eastern Kentucky University, allison_morrison76@mymail.eku.edu

Follow this and additional works at: <https://encompass.eku.edu/dnpcapstones>



Part of the [Nursing Commons](#)

Recommended Citation

Morrison, Allison S., "Using an On-line Educational Module to Increase Nurses' Conviction and Confidence in the Use of the Teach-Back Method for Discharge Instructions" (2018). *Doctor of Nursing Practice Capstone Projects*. 37.

<https://encompass.eku.edu/dnpcapstones/37>

This Open Access Capstone is brought to you for free and open access by the Baccalaureate and Graduate Nursing at Encompass. It has been accepted for inclusion in Doctor of Nursing Practice Capstone Projects by an authorized administrator of Encompass. For more information, please contact Linda.Sizemore@eku.edu.

Using an On-line Educational Module to Increase Nurses' Conviction and
Confidence in the Use of the Teach-Back Method for Discharge Instructions

Allison Morrison

Eastern Kentucky University

Abstract

Health literacy status can affect an individual's ability to self-monitor and manage chronic conditions. It is not uncommon for patients to have difficulty comprehending key patient instructions. The role of the nurse in the hospital setting encompasses many facets which include patient teaching. Providing effective patient teaching is one role that many nurses do not feel confident in implementing. A sample of (N=18) nurses participated in on-line educational program to improve conviction and confidence in use of the teach-back method for delivery of discharge instructions. A pretest-posttest design was utilized and measured nurses' conviction and confidence using the Conviction and Confidence Scale (CCS) survey. No statistically significant increase in conviction or confidence scores of participants was noted from pre-testing to post-testing. The survey also measured teach-back behaviors of participants. There was a notable increase of 72% in post-test intervention scores in the use of the teach-back behavior of asking the patient to explain what they were taught. This element is the foundation of the teach-back method.

Keywords: Teach-back, health literacy, patient education, confidence, competence

Using an On-Line Educational Module to Increase Nurses' Conviction and Confidence in the
Use of the Teach-Back Method for Discharge Instructions

By

Allison Morrison

DNP Project Advisor Date

DNP Project Team Member Date

DNP Coordinator Date

Dept. of Baccalaureate & Graduate Nursing Chair Date

Acknowledgement

I would like to thank God for helping me to persevere through this journey. Through his guidance and comfort, I was able to meet the challenges of this endeavor. I would also like to thank Dr. Cornelison, my Faculty advisor for her continued support and guidance. I also want to thank Dr. Owens, my committee member for her valuable feedback and encouragement. Also, I give great thanks to Max for his understanding, encouragement, and unfailing love and support during completion of my project. I also want to thank my wonderful parents who helped me stay the course with their continued love and support especially when I felt defeated. I would be remiss if I didn't mention my work family especially Nancy and Suzanne. Without their help and endless support, I would not have accomplished my goal.

Table of Contents

Introduction.....	6
Problem Description.....	7
Available Knowledge.....	8
Framework.....	13
Specific Aims.....	15
Methods.....	15
Context.....	15
Intervention.....	16
Study of the Interventions.....	17
Measures.....	18
Analysis.....	19
Ethical Considerations.....	19
Results.....	20
Discussion.....	24
Summary.....	25
Interpretation.....	25
Limitations.....	26
Conclusions.....	27
References.....	28

Using an On-line Educational Module to Increase Nurses' Conviction and Confidence in the Use
of the Teach-Back Method for Discharge Teaching

Providing effective patient teaching is an essential role of the nurse. Nursing confidence and competence help to promote sustainability of skills and knowledge (Fry, MacGregor, Hyland, Payne & Chenoweth, 2015). Jiang and Kleitman (2015) defined confidence as “a subjective metacognitive experience that arises from making judgments of certainty regarding one’s performance” (p. 222). The teach-back method is an effective way of delivering patient education and being confident in using it will help with sustainability. Teach-back has been recognized as an evidence-based intervention for enhancing communication during encounters with healthcare providers (Klingbeil & Gibson, 2018). It has also been verified as a way to confirm that patients and caregivers clearly understand medical information the nurse communicates to them (Tamura-Lis, 2013). Misunderstood information and decreased recall can lead to poor patient outcomes. Decreased readmission rates have resulted with the use of the teach-back method (Almkuist, 2017). Nurses who demonstrate confidence in their teaching methodology are more prone to deliver effective patient instructions resulting in positive patient outcomes.

Utilizing self-management skills enables patients to participate in their care after discharge with a goal of decreasing hospitalizations, emergency department (ED) visits, and death (Press et al., 2012). However, low health literacy can make it difficult for patients to comprehend their discharge instructions. When providing new health information, the teach-back method provides a means to have the client recall information given to them, thus enhancing clarification of the health information (Tamura-Lis, 2013). Therefore, it is imperative

that the nurse demonstrates substantial confidence when using the teach-back method to deliver discharge instructions.

Problem Description

Health literacy is the ability to obtain, read, process, understand and use healthcare information to make appropriate health care decisions to maintain good health (Rowlands, 2014). According to Migliori (2013), health literacy is an issue that must be recognized to provide safe, effective, high quality, and efficient care. Patients with low health literacy have a difficult time comprehending and understanding information thus compromising their ability to learn and perform self-care. Teach-back is the preferred practice for verifying the understanding of consent information and is recognized by the National Quality Forum (NQF, 2010) and advocated by the Agency for Healthcare Research and Quality (AHRQ) center (AHRQ, 2015). The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) also recognize the importance of effective communication with hospitalized patients (Brach, Keller, & Hernandez, 2012).

Nursing has an integral role in providing information to patients and caregivers about various facets of disease, management of medications, and self-management. Patients and caregivers who do not understand discharge instructions contribute to unmet patient care needs, medication errors, increased risk for complications, and increased readmissions (Griffey et al., 2015). Hospitalized patients receive a large amount of information, especially at discharge, and often are not given enough time to digest the information or ask questions (Beresford, 2012). To help patients understand and comprehend the information the nurse is providing is crucial for proper self-management of chronic illnesses. Teach-back is an evidence -based teaching strategy that allows the nurse to assess patient's understanding of discharge instructions and correct

inaccurate information (Kornburger, C., Gibson, C., Sadowski, S., Maletta, K., & Klingbeil, C. (2013). Utilizing the teach-back method can be beneficial in helping patients and caregivers understand discharge instructions which can result in better self-management with the added benefit of lower readmission rates. Patient education is a vital part of nursing care and nurses need to be confident in their ability to provide effective patient teaching. Using this method with conviction and confidence will help patients have better understanding and comprehension of their discharge instructions leading to positive patient outcomes.

Available Knowledge

A review of the literature was completed that examined the effectiveness of providing continuing education for the delivery of patient education, nurse's conviction and confidence in the delivery of patient education and the effectiveness of the teach-back method of providing patient education. Examination of the literature included a computerized search of the Cumulative Index of Nursing and Allied Health Literature (CINAHL), Cochrane Library, Medline, and PubMed. The initial search of keywords included teach-back, health literacy, confidence, competence, readmissions, patient education, and comprehension. Various combinations of keywords were used which generated 789 articles. A review of reference lists produced 9 additional articles. The search was narrowed utilizing the English language, nursing discipline, and time frame from 2015 to 2018 which produced 186 articles. No articles were found that specifically investigated nurses' conviction and confidence in using the teach-back method. However, the search produced several studies that examined the effect of continuing education on nurses' confidence and the effectiveness of the teach-back method. A total of eight studies were selected that investigated the use of continuing education and nurse confidence and the effectiveness of using the teach-back method for patient education.

Stoffers and Hatler (2017) conducted a pilot study using a quasi-experimental pretest-posttest design involving a convenience sample of 33 medical/surgical nurses in a teaching hospital in the United States. Nurses attended a two-hour workshop that provided instructions and demonstration on the use of motivational interviewing. A 10-item Likert-type survey with a ranking of strongly disagree (1) to strongly agree (5) was used. The modified survey was a combination of the Teacher Self-efficacy scale and the Confidence in Teaching Diabetes Education survey that measured nurses' confidence in teaching diabetes education. It focused on five areas of self-management including medications, diet, exercise, worsening symptoms, and target ranges possibly indicating problems. The modified survey was completed by the nurses prior to the workshop and again 6 weeks after the workshop. The findings revealed a significant improvement in nurses' confidence in teaching patients ($t = -7.474, p = .0001$).

A study by Powers and Candela (2016) examined the impact of online learning of family presence during resuscitation (FPDR) on nurses' perception and self-confidence. The study was a quasi-experiment, pretest-posttest design using a random assignment of nationally recruited critical care nurses ($N=74$) to a control group ($n=34$) or an intervention group ($n=40$). Perceptions were measured with a 22-item Family Presence Risk-Benefit Scale (FPR-BS) and self-confidence was measured with a 17-item the Family Presence Self-Confidence Scale (FPS-CS) which both were shown to be valid and reliable (Cronbach $\alpha = 0.94$). A five-point Likert scale was used for the FPR-BS ranging from strongly disagree (1) to strongly agree (5) and the FPS-CS scores ranged from not at all confident (1) to very confident (5). A learning module including FPDR was given to the intervention group to complete online. Another online learning module that did not include information on FPDR was completed by the control group. Results revealed increased perception and self-confidence for FPDR in the intervention group. The FPR-

BS mean scores increased from 3.63 to 4.07 ($p < .001$) and the FPS-CS increased from 4.24 to 4.57 ($p < .001$).

Almutairi and Ludington-Hoe (2016) examined kangaroo care education effects on nurses' knowledge and skills confidence. A convenience sample of (N=57) attendees of the 2013 Kangaroo Care Certification Course participated. The study was a quasi- experiment, pretest-posttest design using the Kangaroo Care Knowledge and Confidence Tool. Prior to its use, content validity was determined by three experts in Kangaroo Care. The tool was given to the participants before and after the 2013 Kangaroo Care Certification Course. The findings revealed significantly higher knowledge posttest mean scores (M=88.54, SD= 6.13) than pretest mean scores (M= 78.7, SD= 8.3; $t [54] = -9.10, p < .001$). Posttest mean scores were significantly higher (M= 32.06, SD = 3.5) on the total skills confidence than the pretest mean scores (M= 26.8, SD= 5.2; $t [53] = -8.46, p < .001$).

Saylor et al. (2018) conducted a descriptive, qualitative study that examined the effects of a service learning experience on confidence and clinical skills in baccalaureate nursing students. A purposeful sample of (N=23) students enrolled in a nursing elective course participated in the study. Prior to attending the diabetic camp, participants completed a Perceived Confidence Survey in diabetic management. The survey used a four-point Likert scale and included eight items focusing on confidence related to insulin pump therapy, hypo- and hyperglycemia assessment and treatment, communication with campers and their families, and empathy. The same survey was completed again after completion of the camp. The findings revealed a significant difference between the pre and post perceived confidence survey ($t = -9.91, p = .001$). The greatest difference between the mean scores was the students' confidence on insulin pump therapy with a mean of 2.35 (+/- 0.71) pre-camp compared to a mean of 3.48 (+/- 0.59) post-

camp. The students also completed a reflective analysis paper after the diabetes camp that revealed four topics: understanding the management of diabetes in the community, pre-camp beliefs and fears increase in confidence, and gratefulness for learning outside the classroom and hospital setting.

A study by Cook et al. (2013) investigated the effect of an educational intervention on nursing staff knowledge, confidence, and practice in the care of children with mild traumatic brain injury using a quasi-experimental, one group pretest-posttest design. The study was conducted in a level 1 trauma center with a sample of (N= 25) trauma core registered nurses certified in Pediatric Advanced Life Support and Trauma Nurse Core Curriculum. Multiple choice questions were developed to assess knowledge and confidence and change in practice was assessed using a self-report Likert scale statements. Content and validity of the instruments were conducted by several experts in the field. The educational session lasted 90 minutes and focused on mild traumatic brain injury. Prior to the educational session, a pretest was administered, and a posttest was given after 30-days. The results indicated significant improvement in knowledge (mean pretest: 33.6% vs. mean posttest score: 79.2%; 95% CI [35.6, 55.6]’ $t=9.368$; $p<.001$). Confidence was low pre-intervention (0-32% per question) and increased significantly post-intervention (26%-84% per question).

Howie-Esquivel et al., (2015) performed a prospective cohort design with a historical comparison group using teach-back that consisted of (N=548) patients 65 years or older admitted with a primary or secondary diagnosis of Heart Failure (HF). All patients and caregivers received the TEACH-HF method for take home instruction daily which began within 24 hours of admission until discharge. The TEACH method involved, “Teaching and Education, prompt

follow-up Appointments, Consultation for support services, and Home follow-up phone calls (TEACH-HF)” (pg. 202). Teach-back was the educational model used in this study. The four areas the education focused on included diet modification, medications, warning signs for action, and self-monitoring skills. The findings demonstrated 30-day readmission rate pre-TEACH was 19% and post-TEACH group was 12% ($p=0.003$). Patients in the pre-TEACH group had a 90-day readmission rate of 30% and 19% in post-TEACH group ($p=0.001$).

Griffey et al. (2015) implemented a random control trial (RCT) to investigate the impact of teach-back on comprehension of discharge instructions and satisfaction among emergency patients with limited health literacy. The RCT involved a randomized sample of ($N=245$) patients 18 years or older being discharged from the emergency department (ED) scoring 6 or less on the Rapid Estimate of Adult Literacy in Medicine-Revised (REALM-R) which is consistent with limited health literacy (LHL). One group received discharge instructions using the teach-back method and the other group received the standard discharge instructions. Patients participated in structured interviews after discharge which comprised four questions assessing patient satisfaction. Questions related to ED care, post-ED care, diagnosis, and return instructions assessed comprehension and perceived comprehension. Findings demonstrated no significant differences between teach back and standard discharge for perceived comprehension or patient satisfaction. Patients who received teach back had higher comprehension of post-ED care areas, post-ED medication ($p<0.02$), self-care ($p<0.03$), and follow-up instructions ($p<0.0001$).

Nagaramdeh, Mahmoodi, Noktehdan, Heshmat, and Shakibazadeh (2013) performed a RCT which investigated the effect teach-back had on medication and diet adherence and knowledge among low health literacy and patients with type 2 diabetes. The study involved

(N=127) patients that were randomized into three groups (teach-back (n=45), pictorial image (n=45), and control group (n=45). Three weekly educational sessions lasting 20 minutes were given to the two intervention groups that focused on diabetes knowledge and diet and medication adherence. The control group received routine patient education on diabetes. The findings revealed that both the pictorial image and teach back educational strategies demonstrated increased diet and medication adherence and diabetes knowledge among patients with low health literacy and type 2 diabetes.

Recognizing studies that demonstrated the positive impact that continuing education had on nurses' self- confidence was identified in five of the reviewed studies (Almutairi & Ludington-Hoe, 2016; Cook et al., 2013; Gibson et al., 2017; Powers & Candela, 2016; and Saylor et al., 2018). The evidence reinforces the positive impact continuing education can have on increasing nurses' self-confidence. The value of the evidence is compelling with subsequent positive outcomes in the use of the teach-back method in the delivery of patient education as noted in three reviewed articles (Griffey et al., 2015; Howie-Esquivel et al., 2015; Negarandeh et al., 2013). The literature review indicated using the teach-back method may result in positive patient outcomes such as decreased readmissions, increased comprehension, and improved compliance.

Framework

Transformational leadership (TL) was utilized as the guiding framework for implementation of this project. Transformational leadership is described as ““leader behaviors that transform and inspire followers to perform beyond expectations while transcending self-interest for the good of the organization” (Carlton, Gartner, Boehm, Styles, & Thibault, 2012, p. 22). Transformational nursing leadership is necessary to create a framework that influences

organizational components, procedures and expectations, thus empowering the sustainability of evidence-based practice (EBP) (Everett & Sitterding, 2011). Avolio and Bass (1995) elaborated on the original transformational leadership model by describing four behaviors found in this type of leader. The behaviors include the ability to inspire, the ability to provide intellectual stimulation, charisma, and individualized consideration (Burns, Sorenson, & Goethals, 2004).

The behavior of idealized influence or charisma is seen in leaders who are great role models and are admired by followers (Northouse, 2007). They usually possess high ethical and moral standards. Leaders that have inspirational motivation inspire their followers by motivating them to become devoted to the organization's shared vision. This type of leadership helps boost team spirit (Northouse, 2007). Change is often met with resistance; however transformational leaders can help motivate their followers by inspiring them to develop new ideas (Everett & Sitterding, 2011). Intellectual stimulation is another behavior seen in this type of leadership that allows followers to use their own innovation to improve organizational issues (Northouse, 2007). By allowing followers to be part of the decision-making process, they become empowered thus becoming leaders themselves (Rolfe, 2011). Individualized consideration is another behavior in which leaders serve as coaches. They listen attentively to the needs of their followers while providing a climate of support (Northouse, 2007). Transformational leaders give power to the individuals performing the work (Weberg, 2010).

Focusing on individualized consideration including the leaders' behavior and the effect on others is where a transformation is first recognized (Avolio & Bass, 1995). This transformation includes acknowledging individual needs and helping them develop potential to attain higher levels of performance. Individualized consideration may help to change followers' motives thus helping them to think about more than their self-interests (Avolio & Bass, 1995).

By using this type of leadership to develop and implement an educational program using teach-back, staff nurses were empowered. Allowing followers to be part of the decision-making process empowers them by making them more aware of the goal thus becoming leaders themselves (Rolfe, 2011). Time has been found to be a barrier when implementing teach-back due to nurses overwhelming job duties. However, providing rewards for compliance can help foster motivation which is part of a transformational leader. Using transformational leadership will help transform nurses into leaders and develop ownership of the project and hopefully increase sustainability of the project (Hutchinson & Jackson, 2012).

Specific Aims

The specific aim of this project was to increase nurses' conviction and confidence in the use of the teach-back method for discharge instructions. An on-line educational module was utilized.

Methods

Context

A meeting was held with the Director of the Medical-Surgical units at the medical center where the issue of increased COPD readmissions was shared with the PL. Recruitment of participants included meetings with the nurses on each shift for a total of four days. A convenience sample of (N=18) registered nurses (RNs) employed on the pulmonary unit of the medical center participated in the project. The setting for the project was a 393 bed, not-for-profit medical center located in the Appalachian region of the southern United States. Prior to implementation, support was received from agency stakeholders including nursing leadership, quality management, and the nurse manager. The project was identified as a strategy to help with achieving the facility's strategic plan for decreasing Chronic Obstructive Pulmonary

Disease (COPD) readmissions. The project was implemented on a 24-bed pulmonary unit at the medical center. The nurse manager of the pulmonary unit had expressed an interest in educating staff on the use of the teach-back method for delivery of discharge instructions. The project included a pre-posttest comparison of nurses' conviction and confidence in using the teach-back method following an educational offering presented in an on-line format (Abrams, Rita, Kurtz-Rossi, & Nielsen, 2012).

Intervention

The *Always Use Teach-Back!* Toolkit was used that included an educational module that was free and available on-line (Abrams et al., 2012). The educational module included several videos with scenarios of ineffective examples of communicating patient education followed by effective use of teach-back strategies for delivery of patient education. The toolkit also included the Conviction and Confidence Scale (CCS) survey and the 10 Elements of Competence for Using Teach-Back Effectively. These elements included using a caring tone, making eye contact, using plain language with open-ended questions, asking the patient to use their own words to explain back information, using printed materials, and documenting patient response.

Informational meetings were held on four varying days and times over a two-week period. These were scheduled to meet the work schedule needs of prospective participants employed on the unit. Discussion during the meetings included the purpose of the project and the opportunity to voluntarily consent to participate. Emphasis was given regarding the option of whether or not to participate and that not participating would have no bearing on employment status or performance evaluation. Each person in attendance at the informational meeting was given a packet that included a cover letter, demographic survey, and the CCS surveys. To protect confidentiality of participants and to match pretest and posttest data, participants were

asked to create an identifying four-digit number on their packet and contents in the packet that only they would remember.

During the informational meetings participants who voluntarily agreed to participate, completed the demographic and CCS survey. The teach-back on-line education sessions for the nurses took place in a conference room located adjacent to the pulmonary unit. The conference room and laptops were reserved at designated times and dates. Following completion of the surveys, the participants accessed the educational website to begin viewing the educational modules which allowed the participants to complete the training at their own pace. The sessions took approximately 30 minutes to complete. A convenience sample of RNs employed on a 24-bed pulmonary unit were recruited for the project. Inclusion criteria included all RNs employed on the pulmonary unit and volunteered to participate.

Participants were instructed to begin utilizing the teach-back method for discharge instructions after the last on-line educational module was completed. The nurse manager sent out reminders of the implementation date via the unit's specific social media page and posted reminders on the unit. The 10 Elements of Competency for Using Teach-Back Effectively were placed in conspicuous areas on the pulmonary unit as reminders for the nurses.

The teach-back method was utilized for all discharge instructions for 30 days. The Project Leader (PL) was available on the unit on various days and times to address staff questions or concerns. After the 30 days, the participants were asked to repeat the CCS survey.

Study of Intervention

Paired *t* tests were used to measure the mean scores for conviction and confidence. Frequencies and percentages were obtained for use of the teach-back method and frequency of the use of the elements of effective teach-back.

Measures

A CCS survey from the *Always Use Teach-Back!* Toolkit (Abrams et al., 2012) was used pre-and-post education to measure nurses' conviction and confidence. Validity and reliability have not been established however, the tool is recognized by the AHRQ as an evidence-based means to self-assess the confidence in using teach-back (AHRQ, 2017). A demographic survey was also obtained prior to the education session that addressed participant's age, educational level, years of practice, gender, and whether they work part-time, full-time or per diem.

The CCS survey included four items about conviction and confidence in the use of the teach-back method. Conviction, the importance of using teach-back, was measured using a 10-point Likert scale (1-not at all important to 10- very important). Confidence in the ability to use teach-back was also measured using a 10-point Likert scale with higher scores denoting more confidence. Participants chose a multiple-choice option that corresponded with how often they currently use teach-back. Options for time frames ranged from not at all, <6 months through 2-6 months. The frequency of use of teach-back behaviors was measured by participants choosing all that apply which had been utilized within the past work week. The options included use a caring tone of voice and attitude, display comfortable body language, make eye contact, and sit down, use plain language, ask the patient to explain, in their own words, what they were told, use non-shaming, open-ended questions, avoid asking questions that can be answered with a yes or no, take responsibility for making sure you were clear, explain and check again if the patient is unable to teach back, use reader-friendly print materials to support learning, document use of patient's response to teach-back, and include family members/caregivers if they were present.

Many national entities support the use of teach-back method for delivery of patient education. The AHRQ uses the teach-back training program and supports the use of this method

(AHRQ, 2015). The Institute for Healthcare Improvement (IHI) developed a video of the teach-back method to help improve communication and patient outcomes (IHI, 2018). The *Always Use Teach-Back!* CCS tool can be found on the AHRQ and IHI websites.

Implementing teach back did not require costs related to the capital budget. The *Always Use Teach-Back!* educational modules were on-line and free to use. The nurse manager provided time and a half pay for one half hour of viewing for the RNs who agreed to participate which was taken from the operating budget. The average hourly rate was \$42.00/hr. A sample of (N=18) nurses participated which totaled \$567.00. The educational materials, printing costs, and laptop computers were provided by the institution at no cost.

Analysis

Data were analyzed using the SPSS v.25 statistical software. Descriptive statistics were obtained including frequencies and percentages. Differences in pre and post mean scores for conviction and confidence on the CCS survey were analyzed using a paired *t* test. Frequencies were compared pre and post intervention on teach-back behavior questions.

Ethical Considerations

The project site deferred an expedited Institutional Review Board (IRB) approval to Eastern Kentucky University (EKU). Once approval was received from EKU, approval was obtained from the PL's academic agency. Upon IRB approval, a meeting with the nurse manager of the pulmonary unit took place to set up specific times for the educational sessions. The nurse manager shared the vision and goal of the project. This was evidenced by her posting a PowerPoint presentation of the teach-back method on the unit's dedicated social media page prior to the project start date.

Results

A total of eighteen (N=18) nurses participated in the full project. Attrition rate was two, one resigned and one did not complete the post survey. Analysis of demographic characteristics revealed that 94% worked full-time. Educational preparation of participants ranged from an Associate Degree in Nursing (n=12) to a Master's Degree in Nursing (n=1). The majority of participants had one to five years of experience (33%). Age and gender of participants is reflected in Table 1.

Table 1

Sample Demographic Characteristics (N=18)

Variable	<i>n</i>	%
Age		
18-24 years old	6	33
25-34 years old	5	28
35-44 years old	5	28
45-54 years old	2	11
Gender		
Female	17	94
Male	1	6
Highest Level of Education		
Associate Degree	12	66
Baccalaureate	5	28
MSN	1	6
Employment Status		
Full-time	17	94
Part-time	1	6
Number of Years Practicing Nursing		
<1 year	5	28
1-5 years	6	33
6-10 years	2	11
11-15 years	1	6
>15 years	4	22

Paired *t* tests were conducted to test for differences in mean scores for conviction and confidence following an educational module. There was no statistically significant increase in conviction scores pre- survey (M= 2.88, SD= .323) to post- survey (M=2.94, SD= .235), *t* (17) = .566, *p*<.05. (Table 2)

Table 2

Total Mean Conviction Scores

	N	M ± SD	df	<i>t</i>	<i>p</i>
Conviction	18	2.88 ± .323	17	.566	.579

There was no statistically significant increase in confidence scores pre- survey ((M= 2.88, SD= .323) to post- survey (M=2.94, SD= .235), *t* (17) = .566, *p*<.05. The eta squared value was .02 indicating a small effect size. (Table 3)

Table 3

Total Mean Confidence Scores

	N	M± SD	df	<i>t</i>	<i>p</i>
Confidence	18	2.88 ± .232	17	.566	.579

The multiple-choice option, “I do not do it now, but plan to do this in the next month” revealed 61% (n=11) of participants were going to implement teach-back pre-intervention; however, only 11% (n=2) chose this response post-intervention. (Table 4)

Table 4

The Use of Teach-back (N=18)

	n	% Pre-survey	n	% Post-survey
I have been doing this for 6 months or more	4	22	2	11
I have been doing this for less than 6 months	2	11	14	78
I do not do it now, but plan to do this in the next month	11	61	2	11
I do not do it now, but plan to do this in the next 2 to 6 months	1	6	0	0
I do not do it now and do not plan to do this	0	0	0	0

There was a notable increase of 72% in posttest intervention scores in the frequency of teach-back behavior by participants regarding the behavior ask the patient to explain, in their own words, what they were told. (Table 5)

Table 5

Elements of Effective Teach-back; Frequency of Use (N=18)

	n	% Pre-survey	n	% Post-survey
Use a caring tone of voice and attitude	16	89	17	94
Display comfortable body language, make eye contact, and sit down	17	94	15	83
Use plain language	18	100	18	100
Ask the patient to explain, in their own words, what they were told	3	17	16	89
Use non-shaming, open-ended questions	11	61	15	83
Avoid asking questions that can be answered with a yes or no	4	22	12	67
Take responsibility for making sure you were clear	13	72	16	89
Explain and check again if the patient is unable to teach back	9	50	11	61
Use reader –friendly print materials to support learning	12	67	12	67
Document use of patient's response to teach-back	4	22	8	44
Include family members/caregivers if they were present	18	100	17	94

Discussion

Seven (64%) of the eleven elements of effective teach-back increased from pre-intervention to post-intervention. The increased use of these elements may be reflective of increased conviction and confidence post-intervention. Two (18%) of the elements remained the

same post-intervention, while two (18%) of the elements decreased from pre-intervention to post-intervention.

The results for conviction may have revealed no statistically significant increase because participants' perceptions of those convictions may not have changed after viewing the education modules. A decrease in confidence scores may be attributed to nurses increased understanding following the educational offering. This heightened awareness may also be indicated by the increased use of the elements of effective teach-back. The foundation of the teach-back method is asking the patient to repeat in their own words the information they were given. The largest increase in the frequency of nurses' responding positively was noted in the element of having the patient repeat back the information.

Summary

A strength of the project was that participants realized that using the teach-back method helped them to clarify information during discharge teaching. This was evidenced by their comments which included, "teach-back helped...with clarification at discharge;" "this teaching style helps decrease the communication barriers between patient and staff;" and "you are able to address...misunderstandings prior to discharge to prevent misuse of ordered medication and readmittance to the hospital.

Interpretation

Nurses began utilizing more of the effective elements of the teach-back method post-intervention with a substantial increase of 72% in the frequency of the teach-back behavior asking the patient to reiterate what the nurse taught them. This may indicate an increase in their conviction and confidence in using the teach-back method. The results of the intervention align with the findings from the literature. Nurses feel more confident when providing patient

teaching on subjects they are knowledgeable about and research supports the use of continuing education in increasing nurses' confidence (Almutairi & Ludington-Hoe, 2016; Cook et al., 2013; Gibson et al., 2017; Powers & Candela, 2016; and Saylor et al., 2018). Other advantages of continuing education include improved credibility and nurse confidence in nursing skills, confirmation of nurses' knowledge and skills, and recognition of nursing as a profession (Schroeter, 2015). The response "I plan to do this in the next month" revealed 61% (n=11) of participants were going to implement teach-back pre-intervention however, only 11% (n=2) chose this response post-intervention which may indicate they did not view it as a valuable or effective way of providing patient teaching.

Patients receive a significant amount of information at discharge. Utilizing teach-back for discharge instructions is a valuable method of providing education. The teach-back method is an easy to use evidence-based strategy which allows nursing staff to confirm and/or correct inaccurate information with an objective of setting realistic goals together with the patient and their caregivers. Educating patients with chronic illness is imperative to decrease hospitalizations, reduce mortality, improve quality of life, and decrease costs (Baker et al., 2011).

Limitations

Limitations included a small sample size (N=18) and short duration of implementation. Utilization of a different survey to measure nurses' conviction and confidence may offer more reliability and validity for results; however, the findings have important implications for clinical practice. When nurses are properly educated on effective methods on the use of the teach-back method and are confident in using it, positive patient outcomes may result.

Conclusions

This project investigated the use of an educational module on the teach-back method to increase nurses' conviction and confidence. Patient education entails a large portion of the nurses' role and being confident in the ability to provide effective discharge instructions is imperative in the achievement of positive patient outcomes including increased adherence to medication regimens and decreased readmissions. Nurses utilized more elements of teach-back post-intervention indicating more conviction and confidence in their ability to use this method effectively. Sustainability of the project includes incorporating the teach-back on-line module as an annual continuing education requirement. Analysis of readmissions for chronic illnesses may be positively impacted using the teach-back method. It is important to have support from nursing management to sustain the practice of the teach-back method.

References

- Abrams, M. A., Rita, S., Kurtz-Rossi, S., & Nielsen, G. (2012). Always use teach-back! toolkit. Retrieved from www.teachbacktraining.org
- Agency for Healthcare Research and Quality. (2015). Retrieved from www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/healthlittoolkit2-tool5.html.org
- Agency for Healthcare Research and Quality. (2017). Retrieved from www.ahrq.gov/professionals/quality-patient-safety/patient-family-engagement/pfprimarycare/interventions/teach-back.html
- Almkuist, K. D. (2017). Using teach-back method to prevent 30-day readmissions in patients with heart failure: a systematic review. *MedSurg Nursing*, 26, 309-351. Retrieved from <https://search-proquest-com.marshall.idm.oclc.org/docview/1953849293?pq-origsite=summon&accountid=12281>
- Almutairi, W. M., & Ludington-Hoe, S. M. (2016). Kangaroo care education effects on nurses' knowledge and skills confidence. *The Journal of Continuing Education in Nursing*, 47, 518-524. <https://doi.org/10.3928/00220124-20161017-11>
- Avolio, B. J., & Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis: a multi-level framework for examining the diffusion of transformational leadership. *Leadership Quarterly*, 6, 199-218. Retrieved from [file:///C:/Users/shb2805/Downloads/549630%20\(1\).pdf](file:///C:/Users/shb2805/Downloads/549630%20(1).pdf)
- Baker, D. W., DeWalt, D. A., Schillinger, D., Hawk, V., Ruo, B., Bibbins-Domingo, K., ... Pignone, M. (2011). "Teach to goal": theory and design principles of an intervention to

- improve heart failure self-management skills of patients with low health literacy. *J Health Commun*, 16, 73-88. <https://doi.org/10.1080/10810730.2011.604379>
- Brach, C., Keller, D., & Hernandez, L. M. (2012). Ten attributes of health literate health care organizations. Retrieved from Institute of Medicine of the National Academies website
- Beresford, L. (2012). Teach back communication strategy helps healthcare providers help their patients. *The Hospitalist*. Retrieved from <https://www.the-hospitalist.org/hospitalist/article/125116/teach-back-communication-strategy-helps-healthcare-providers-help-their>
- Burns, J. M., Sorenson, G. J., & Goethals, G. R. (2004). *Encyclopedia of Leadership*. Retrieved from web.a.ebscohost.com.marshall.idm.oclc.org/ehost/detail/detail?vid=0&sid=22ca7562-29b4-49a1-b537-8cbc5d22c37d%40sessionmgr4007&bdata=JnNpdGU9ZWZWhvc3QtOGI2ZQ%3d%3d#AN=474283&db=nlebk
- Carlton, E., Gartner, A., Boehm, H., Styles, A., & Thibault, J. (2012). Improving outcomes with the quality and safety investigator program. *Nursing Management*, 22-26. <http://dx.doi.org/10.1097/01.NUMA.0000416410.68355.f9>
- Cook, R. S., Gillespie, G. L., Kronk, R., Daugherty, M. C., Moody, S. M., Allen, L. J., ... Falcone Jr., R. A. (2013). Effect of an educational intervention on nursing staff knowledge, confidence, and practice in the care of children with mild traumatic brain

injury. *Journal of Neuroscience Nursing*, 108-118.

<https://doi.org/10.1097/JNN.0b013e318282906e>

Everett, L. Q., & Sitterding, M. C. (2011). Transformational leadership required to design and sustain evidence-based practice: A system exemplar. *Western Journal of Nursing Research*, 33, 398-426. <http://dx.doi.org/10.1177/0193945910383056>

Fry, M., MacGregor, C., Hyland, S., Payne, B., & Chenoweth, L. (2015). Emergency nurses' perceptions of the role of confidence, self-efficacy and reflexivity in managing the cognitively impaired older person in pain. *Journal of Clinical Nursing*, 24 (11-12), 1622-1629. <https://doi.org/10.1111,jocn.12763>

Griffey, R. T., Shin, N., Jones, S., Aginam, J., Gross, M., Kinsella, Y., ... Kaphingst, K. A. (2015). The impact of teach-back on comprehension of discharge instructions and satisfaction among emergency patients with limited health literacy: a randomized, controlled study. *Journal of Communication in Healthcare*, 8, 10-20. <https://doi.org/10.1179/1753807615Y.0000000001>

Howie-Esquivel, J., Carroll, M., Brinker, E., Kao, H., Pantilat, S., Rago, K., & De Marco, T. (2015). A strategy to reduce heart failure readmissions and inpatient costs. *Cardiol Res.*, 6, 201-208. <https://doi.org/10.14740/cr384w>

Hutchinson, M., & Jackson, D. (2012). Transformational leadership in nursing: towards a more critical interpretation. *Nursing Inquiry*, 20, 11-22. <http://dx.doi.org/>

Jiang, Y., & Kleitman, S. (2015). Metacognition and motivation: Links between confidence, self-protection and self-enhancement. *Learning and Individual Differences*, 37, 222-230. <https://doi.org/10.1016/j.lindif.2014.11.025>

- Klingbeil, C., & Gibson, C. (2018). The teach back project: a system-wide evidence-based practice implementation. *Journal of Pediatric Nursing, 42*, 81-85.
<https://doi.org/10.1016/j.pedn.2018.06.002>
- Kornburger, C., Gibson, C., Sadowski, S., Maletta, K., & Klingbeil, C. (2013). Using “teach-back” to promote a safe transition from hospital to Home: An evidence-based approach to improving the discharge process. *Journal of Pediatric Nursing, 28*, 282-291.
<http://dx.doi.org/10.1016/j.pedn.2012.10.007>
- Migliori, R. (2013). Helping tomorrow’s health care consumers. *Journal of Health Communication, 18*, 3-4. <https://doi.org/10.1080/10810730.2013.829139>
- Negarandeh, R., Mahmoodi, H., Noktehdan, H., Heshmat, R., & Shakibazadeh, E. (2013). Teach back and pictorial image educational strategies on knowledge about diabetes and medication/dietary adherence among low health literate patients with type 2 diabetes. *Primary Care Diabetes, 7*, 111-118. <https://doi.org/10.1016/j.pcd.2012.11.001>
- Northouse, P. G. (2007). *Leadership theory and practice* (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Powers, K. A., & Candela, L. (2016). Family presence during resuscitation: impact of online learning on nurses’ perception and self-confidence. *American Journal of Critical Care, 25*, 302-308. <https://doi.org/10.4037/ajcc2016814>
- Press, V. G., Arora, V. M., Shah, L. M., Lewis, S. L., Charbeneau, J., Naureckas, E. T., & Krishnan, J. A. (2012). Teaching the use of respiratory inhalers to hospitalized patients with asthma or COPD: a randomized trial. *Journal of General Internal Medicine, 27*, 1317-25. <https://doi.org/10.1007/s11606-012-2090-9>

- Rolfe, P. (2011). Transformational leadership theory: What every leader needs to know. *Nurse Leader*, 54-57. <http://dx.doi.org/10.1016/j.mnl/2011.01.014>
- Rowlands, G. (2014, July 1). Health literacy. *Human Vaccines & Immunotherapeutics*, 10, 2130-2135. <https://doi.org/10.4161/hv.29603>
- Saylor, J., Hertsenberg, L., McQuillan, M., O'Connell, A., Shoe, K., & Calamaro, C. J. (2018). Effects of a service learning experience on confidence and clinical skills in baccalaureate nursing students. *Nurse Education Today*, 61, 43-48. <https://doi.org/10.1016/j.nedt.2017.11.009>
- Shroeter, K. (2015). The value of certifications. *Journal of Trauma Nursing*, 22, 53-54. <https://doi.org/10.1097/JTN.0000000000000120>
- Squire promoting excellence in healthcare improvement reporting. (n.d.). Retrieved from <http://www.squire-statement.org/>
- Stoffers, P. J., & Hatler, C. (2017). Increasing nurse confidence in patient teaching using motivational interviewing. *Journal for Nurses in Professional Development*, 33, 189-195. <https://doi.org/10.1097/NND.0000000000000370>
- The Institute for Healthcare Improvement. (2018). Retrieved from www.ihl.org
- Tamura-Lis, W. (2013). Teach-back for quality education and patient safety. *Urologic Nursing*, 33, 267-271. <https://doi.org/10.7257/1053-816X.2013.33.6.267>
- Weberg, D. (2010). Transformational Leadership and Staff Retention An Evidence Review With Implications for Healthcare Systems. *Nursing Administration Quarterly*, 34, 246-258. <http://dx.doi.org/10.1097/NAQ.0b013e3181e70298>