A blue stethoscope is the central focus, resting on a white surface. The background is a blurred hospital hallway with white walls and doors. A blue semi-transparent box is overlaid on the right side of the image, containing the title and author information.

Implementing the teach-back method in a mental health setting to increase health literacy

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Health Literacy

- World Health organization defines health literacy as the capability of an individual to understand complex health knowledge.
- Populations who experience low health literacy.
 - Non-native English speakers and individuals who have not graduated from high school.
 - Challenge for some elderly population.

patients with low **HEALTH LITERACY...**



Are more likely to visit an
EMERGENCY ROOM



Have more
HOSPITAL STAYS



Are less likely to follow
TREATMENT PLANS



Have higher
MORTALITY RATES



Background and Significance

- Health literacy is an important component that is achieved by the health care provider and patient.
- Priority for patient safety
 - Understanding of complex medical information
- Low health literacy is connected with poor mental and physical health
- Self-care and lifestyle



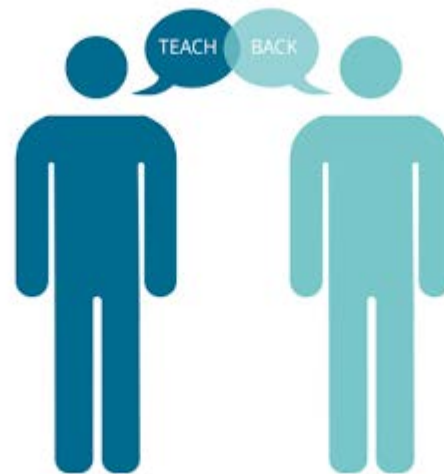
Problem Statement

- Limited health literacy affects how an individual is able to process the information provided to them.
- According to the Agency for Healthcare Research and Quality, 40-80% chance that information given to the patients is forgotten immediately
- Combination of low health literacy and chronic disease is an economic burden on the health care system



Teach-back Method

- Universal tool for health care providers in any health care setting to broaden the patient's health literacy.
- Improves information retention.
- Helps facilitate effective communication between patients and health care providers.



Purpose Statement

- The purpose of this project was to implement the teach-back method to staff and health care providers.
- Provide cultural sensitivity and improved connections between patients and providers to aim for better patient outcomes.

The Teach-back Method

A skill for effective patient communication



Project Objectives

- Objective 1: Develop a teach-back method training program that will be used in a mental health residential center.
- Objective 2: Provide education about the evidence-based teach-back method to staff and health care providers
- Objective 3: Evaluate the impact of the teach-back method with a pre and post questionnaire following the educational intervention



Project Question

- Will implementing the teach-back method training program and measuring the health care providers' confidence level increase health literacy in patients with diabetes and hypertension over a four-week period?



Review of literature

- Boolean search
- 1,270 articles from database
- Keyword: teach-back method, health literacy, diabetes, and hypertension
- Databases: CINAHL, Google Scholar, PubMed.
- Inclusion criteria: full texts, peer reviewed journals, meta analysis, and systematic review.



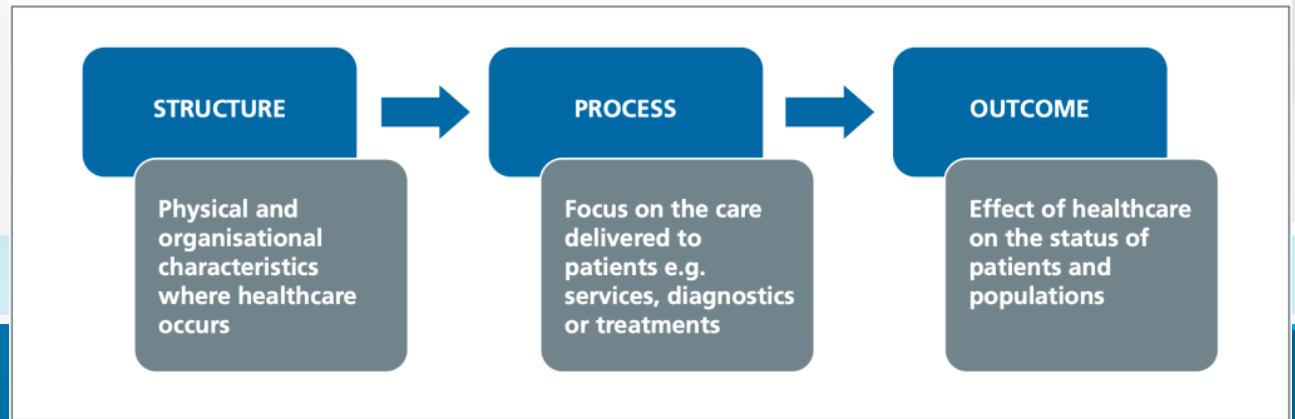
Review of literature

Authors	Findings of the teach-back method
Dinh et al. (2016)	1,285 participants Positive outcome on knowledge retention, quality of life, self-efficacy, and reduced re-admission rates.
Griffey et al. (2015)	Level 1 trauma center, 408 participants Reported higher health information retention level prior to being discharged from ED.
Samuels-Kalow et al. (2016)	51 participants Supportive and in favor of the teach-back method for discharge protocol.
Green et al. (2015)	Teach-back method reduced hospital readmission rates. Findings indicated a 36% reduction in re-admission rates.
Zullig et al. (2015)	Indicated the teach-back method was effective for diabetes prevention and reduction on blood pressure readings.

Theoretical Framework

- Donabedian model (2005)
- Three components for evaluating the quality of care
 - Structure
 - Process
 - Outcome

Figure 1: The Donabedian model for quality of care



Data Collection and Procedure

- The QI project did not require the Institutional Review Board (IRB).
- Direct recruitment of population of interest and utilized in-person and zoom meetings.
- Paper/pencil surveys were distributed during the educational intervention sessions.
- Chart audit and data collection performed over a four-week period
- Data was exported to IBM SPSS Statistics



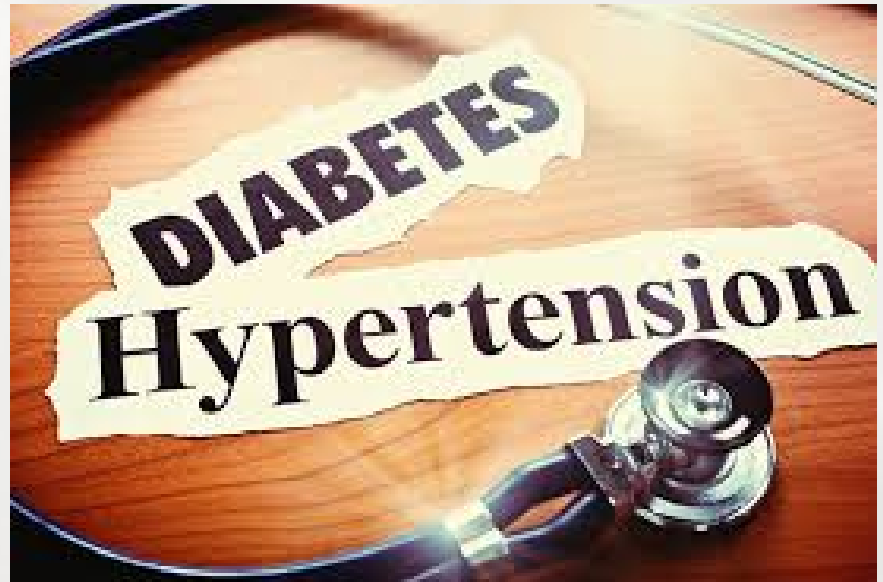
Methods

- Design: Paired/dependent sample t-tests to compare mean differences on pretest and posttest.
 - Descriptive statistics
- Sample: Registered Nurses, Licensed Vocational Nurses, and Licensed Psychiatric Technician
- Setting: Large facility for psychiatric mental health clients.



Measures

- Demographics: age, gender, education, years of employment, title (RN, LVN, LPT), employment status.
- Conviction and confidence Scale.
- Teach-back method tool.
- Chart audit tool for blood pressure and fingerstick readings.



Participant Characteristics (N=17)

Item	Response Code
Participant Age	1=18-25 2=26-35 3=36-45 4=46-55 5=56-65 6=65+
Gender	1=Female 2=Male
Level of Education	1. Nursing Diploma 2. Associate's Degree 3. Bachelor's Degree 4. Master's Degree 5. Doctorate Degree
Years of Employment	1=1-5 2=6-10 3=11-15 4=16-20 5=21-25 6=26+
Type of License	1. RN 2. LVN 3. Psych Tech
Work Status	1.Full-time 2. Part-Time 3. Per-Diem

Variable	Frequency	%
Age		
18-25	4	23.5
26-35	5	29.4
36-45	3	17.6
46-55	3	17.6
56-65	2	11.8
Gender		
Male	6	35.3
Female	11	64.7
Education		
Associates Degree	9	53.1
Baccalaureate	8	47.1
Years of Employment		
1-5	9	52.9
6-10	5	29.4
11-15	1	5.9
16-20	2	11.8
Type of License		
RN	6	35.5
LVN	6	35.5
Psych Tech	5	29.4
Work Status		
Full-Time	6	35.3
Part-Time	5	29.4
Per Diem	6	35.3
N = 17		

Conviction and Confidence Scale



Conviction and Confidence Scale

Fill this out before you start using teach-back, and 1 and 3 months later.

Name: _____

Check one: Before - Date: _____

1 month - Date: _____

3 months - Date: _____

1. On a scale from 1 to 10, how **convinced** are you that it is important to use teach-back (ask patients to explain key information back in their own words)?

Not at all important Very Important

1 2 3 4 5 6 7 8 9 10

2. On a scale from 1 to 10, how **confident** are you in your ability to use teach-back (ask patients to explain key information back in their own words)?

Not at all confident Very Confident

1 2 3 4 5 6 7 8 9 10

3. How often do you ask patients to explain back, in their own words, what they need to know or do to take care of themselves?

- I have been doing this for 6 months or more.
- I have been doing this for less than 6 months.
- I do not do it now, but plan to do this in the next month.
- I do not do it now, but plan to do this in the next 2 to 6 months.
- I do not do it now and do not plan to do this.

1



Conviction and Confidence Scale continued

4. Check all the elements of effective teach-back you have used **more than half the time in the past work week**.

- 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 and patient's response to teach-back.
- Include family members/caregivers if they were present.

Notes: _____

2



Teach-back Observation Tool

Care Team Member: _____ Date: _____

Observer: _____ Time: _____

Did the care team member...	Yes	No	N/A	Comments
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 to do about: <ul style="list-style-type: none"> • Signs and symptoms they should call the doctor for? • Key medicines? • Critical self-care activities? • Follow-up appointments? 				
Use non-shaming, open-ended questions?				
Avoid asking questions that can be answered with a yes or no?				
Take responsibility for making sure they were clear?				
Explain and check again if the patient is unable to use teach-back?				
Use reader-friendly print materials to support learning?				
Document use of and patient's response to teach-back?				
Include family members/caregivers if they were present?				

Teach-back
observation
tool

Results

Descriptive Statistics of Relevant Variables by Type of Test

Variable	Pretest		Posttest	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Conviction	7.71	1.31	9.59	0.51
Confidence	7.29	1.40	8.88	0.70
Frequency of Teach-Back Elements	5.29	1.45	9.94	0.90

N = 17

- Posttest scores remained consistently higher than pretest for all three measures
- Individuals reported higher confidence and conviction scales on week 4.
- Individuals reported significantly higher use of the teach-back elements.



Results

Descriptive Statistics of Blood Pressure (Systolic, Diastolic) and Glucose Levels (mg/L)

Variable	Pretest		Posttest	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Glucose	269.78	45.28	223.44	37.60
Systolic Pressure	171.90	8.00	156.76	7.15
Diastolic Pressure	80.66	0.83	75.11	1.80

n = 5 for diabetic glucose; *n* = 3 for systolic and diastolic blood pressure

- Descriptive statistics show that glucose and blood pressure (systolic, diastolic) readings decreased from pretest to post test.
- Significant differences between pretest and posttest scores for glucose and systolic blood pressure
- No difference in diastolic pretest and posttest measures.



Discussion



Project intervention of the teach-back method resulted in improving the mental health patient's health literacy.



Effective in reducing blood pressure and blood glucose measurement



Health care providers will continue to utilize the teach-back method.



Promote health maintenance and improve patient outcomes.

Study Limitation

- Limitation was identified during the implementation phase.
- DNP project was limited during the COVID-19 phase.
- Small participants sample size.
- Low patient census.
- Healthcare providers did not consistently use the teach-back method.



Further Dissemination

- Consider alternate methods to use the teach-back method due to COVID-19 pandemic.
- Use of technology and telehealth
- Pre-record an educational video to educate more staff.
- Present to other mental health rehab facilities.
- Present in local conferences.



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