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ORIGINAL ARTICLE

## **Retrospective Study** Effect of teach-back health education combined with structured psychological nursing on adverse emotion and patient cooperation during <sup>99</sup>Tc-3PRGD2.SPECT/CT

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### Abstract

#### BACKGROUND

99mTc-3PRGD2.SPECT/CT is a commonly used examination method in nuclear medicine. However, patients receiving 99mTc-3PRGD2.SPECT/CT have insufficient knowledge of this method and worry about the examination results.

#### AIM

To investigate the effect of teach-back health education combined with structured psychological nursing on adverse emotion and cooperation in patients undergoing 99mTc-3PRGD2.SPECT/CT examination.

#### **METHODS**

Ninety patients undergoing 99mTc-3PRGD2.SPECT/CT examinations were divided into a study group and a control group using a simple random number table, and 45 cases were allocated to each group. Routine nursing was provided to the control group, and teach-back health education combined with structured psychological nursing was provided to the study group on the basis of the control group. Heart rate, diastolic blood pressure, systolic blood pressure, self-rating depression scale (SDS), and self-rating anxiety scale (SAS) were assessed before and after the intervention, and examination cooperation and intervention satisfaction were assessed in the two groups before, during, and after the examination.

#### RESULTS

Before the examination, heart rate, diastolic blood pressure, and systolic blood pressure in the study group were not significantly different from the values of the control group (P > 0.05). The results of the study group before and after the examination were lower than those in the control group (P < 0.05). Before the



intervention, SDS and SAS scores in the study group were not significantly different from those in the control group (P > 0.05). After the intervention, SDS and SAS scores in the study group were lower than those in the control group (P < 0.05). The degree of cooperation was higher in the study group than in the control group (P < 0.05). The satisfaction rate with the intervention was higher in the study group than in the control group (P < 0.05).

#### **CONCLUSION**

Teach-back health education combined with structured psychological nursing can help maintain the stability of blood pressure and heart rate, relieve negative emotions, and improve the satisfaction and cooperation of patients undergoing 99mTc-3PRGD2.SPECT/CT examinations.

Key Words: Bad mood; Cooperation; Nuclear medicine; Structured psychological care; Teach-back health education; 99mTc-3PRGD2.SPECT/CT examination

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**Core Tip:** Patients generally have a certain degree of fear of <sup>99m</sup>Tc-3PRGD2.SPECT/CT, we explore the value of teach-back health education combined with structured psychological care interventions.

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#### INTRODUCTION

<sup>99m</sup>Tc-3PRGD2.SPECT/CT is a commonly used examination method in nuclear medicine imaging departments that can provide an objective reference for disease diagnosis and treatment. It has many advantages, such as ease of operation, and plays an important role in clinical practice[1,2]. However, patients undergoing 99mTc-3PRGD2.SPECT/CT have insufficient knowledge of this examination mode and worry about the examination results. Thus, a certain degree of fear, tension, anxiety, and other psychological states are prevalent, resulting in poor patient cooperation during the examination, which can adversely affect the examination results[3-5]. Therefore, effective care during the examination is critically needed.

Teach-back health education is a clinically important intervention model that is mainly used to provide health education to patients and allow them to express their understanding of the learning material in their own words. Nursing staff may intervene if patients do not properly understand until the patients have mastered the relevant information[6,7]. Structured psychological nursing is a commonly used psychological nursing method, comprised of different psychological intervention measures and used to implement comprehensive interventions in organic combination with health education, stress management, coping skills, etc[8].

Based on this, 90 patients undergoing 99mTc-3PRGD2.SPECT/CT examination at our hospital were selected to explore the value of teach-back health education combined with structured psychological nursing intervention.

#### MATERIALS AND METHODS

#### General information

From July 2020 to February 2022, 90 patients undergoing 9mTc-3PRGD2.SPECT/CT examinations were divided into a study group and a control group according to a simple random number table, with 45 cases assigned to each group.

#### Selection criteria

Inclusion criteria: (1) Patients undergoing 99mTc-3PRGD2.SPECT/CT examination; (2) aged 18-70 years old; (3) clear consciousness and good understanding and communication abilities; and (4) patients or their families were aware of this study and signed a consent form.



Exclusion criteria: (1) Patients with speech communication disorders or cognitive dysfunction; (2) patients with mental system diseases; (3) patients with immune system diseases or systemic infectious diseases; and (4) patients with malignant tumors and cancer cell spread.

#### Measurements

Control group: Routine nursing care was provided. (1) Before the examination, the importance, necessity, and basic knowledge of a 99mTc-3PRGD2.SPECT/CT examination, including the purpose of the examination, relevant precautions, etc., were patiently explained to the patients to alleviate adverse emotions and guide them to report subjective feelings, patiently answer their questions, and ensure that the patients underwent the examination with a positive attitude; (2) During the examination, the vital signs and state of consciousness of the patients were closely monitored, and patients were given comfort by touching their limbs and other forms of reassurance to reduce tension and other psychological factors in the patient; and (3) After the examination, the patients were advised to drink more water to increase the urine volume and thus accelerate the efflux of radiopharmaceuticals, and we closely monitored whether the patient's hemogram was normal. Proper treatment was provided promptly if adverse reactions occurred.

Study group: On the basis of the control group, teach-back health education combined with structured psychological care and teach-back health education were adopted: (1) Information transmission: most patients had insufficient knowledge of 9mTc-3PRGD2.SPECT/CT examination, including the fact that this examination mode involves radionuclide radiation, and most of them worried about their own symptoms and examination results. Thus, depression, anxiety, and fear were likely to occur. For this reason, the importance and purpose of the examination, relevant precautions, and cooperation skills during the examination were explained in detail to patients beforehand. (2) Effect evaluation: patients expressed the educational content in their own words. The patients were instructed to perform operation drills on the spot, and a thorough assessment of their understanding of the educational material was performed, based on which targeted adjustment and optimization were provided. The educational method was thus improved until the patients could effectively demonstrate their understanding of the educational content; and (3) Mastery was assessed by confirming that the patient could accurately and comprehensively repeat the relevant information regarding the 99mTc-3PRGD2.SPECT/ CT examination.

Structured psychological nursing consists of the following components: (1) Active communication with patients is pursued to reduce alienation and bad mood using simple language to enhance understanding, showing a kind attitude, and talking at a peaceful speech rate to provide encouragement with active listening and establish a harmonious medical relationship. In this manner, patients are guided to report their inner feelings and alleviate bad mood by shifting attention, and their confidence is enhanced by actively describing to them successful cases, thus assisting them to adopt a good mentality; (2) Cognitive therapy is carried out in further psychological nursing, the staff collects and assesses the patient's knowledge of 99mTc-3PRGD2.SPECT/CT, understands their coping ability and psychological needs, points out their current improper understanding and coping behavior, promotes their correct understanding of 99mTc-3PRGD2.SPECT/CT, and actively copes with psychological stress. This method can aggravate the psychological burden of patients to a certain extent, so the staff should first communicate with the family members, carry out effective psychological counseling and support, obtain the cooperation and support of the patient, and guide the family members to provide the patients with affectionate comfort and encouragement to improve their sense of security; and (3) The psychological state is consolidated through self-relaxation training; the patients are informed of the benefits of self-relaxation training ("breathing method"), including relieving psychological pressure and reducing the degree of pain, and are guided to repeat the various times.

#### Outcome measures

Heart rate, diastolic blood pressure, and systolic blood pressure were assessed before, during, and after the examination in the two groups. The levels of depression and anxiety before and after intervention were determined according to the self-rating depression scale (SDS) and self-rating anxiety scale (SAS), respectively, with higher scores indicating more severe depression and anxiety. Statistics of cooperation: the evaluation of patients was scored with a maximum of 100 points: 90-100 points for complete cooperation; 70-89 points for basic cooperation, and less than 70 points for lack of cooperation. For this calculation, the following formula was used: examination cooperation = (complete cooperation + basic cooperation)/total number of cases × 100%. Statistical analysis of the intervention satisfaction as measured by the Newcastle Nursing Satisfaction Scale was performed. This scale rates patient satisfaction as very satisfied, generally satisfied, or dissatisfied, and satisfaction was calculated with the following formula: satisfaction = (generally satisfied + very satisfied)/total number of cases × 100%.

#### Statistical analysis

SPSS 22.0 was used to analyze the data. The data were expressed as mean  $\pm$  SD, and the t test, enumeration data *n* (%), and  $\chi^2$  test were used in the analysis. *P* < 0.05 indicated that the difference was



statistically significant.

#### RESULTS

#### General data

The gender, age, education level, and other data of the participants in the study and control groups were similar and comparable (P > 0.05) (Table 1).

#### Heart rate and blood pressure

Before the examination, heart rate, diastolic blood pressure, and systolic blood pressure values in the two groups were not significantly different (P > 0.05). These measurement values were all higher in both groups after the examination compared to those measured before the examination. After the examination, these measurement values were lower in the study group than in the control group (P < 0.05) (Table 2).

#### Levels of depression and anxiety

Before the intervention, SDS ( $62.42 \pm 6.01$ ) and SAS ( $61.79 \pm 5.45$ ) scores in the study group were not significantly different from those in the control group ( $63.06 \pm 5.64$  and  $62.29 \pm 6.37$ ) (P > 0.05). After the intervention, SDS (41.15  $\pm$  4.51) and SAS (42.46  $\pm$  5.19) scores in the study group were lower than those in the control group ( $46.05 \pm 5.07$  and  $47.71 \pm 5.62$ ) (P < 0.05), as shown in Table 3.

#### Checking fit

The degree of cooperation during the examination was higher in the study group (97.78%) than in the control group (84.44%) (P < 0.05), as shown in Table 4.

#### Intervention satisfaction

Intervention satisfaction was higher in the study group (95.56%) than in the control group (82.22%) (P <0.05), as shown in Table 5.

#### DISCUSSION

The 9mTc-3PRGD2.SPECT/CT examination method involves exposure to radioactivity, and patients are prone to fear, depression, and other psychological problems due to lack of understanding of the examination mode[9-11]. Therefore, providing effective health education and psychological care is critical for this examination. This study adopted a relevant health education model and psychological nursing for patients who were undergoing a 99mTc- 3PRGD2.SPECT/CT examination in our hospital after the implementation of intervention achieved good results.

#### Effects of teach-back health education and structured psychological nursing on physical and mental state

The results of this study showed that heart rate, diastolic blood pressure, and systolic blood pressure increased in both groups during and after the examination compared with those before the examination, but the levels of each index were lower in the study group than in the control group. The SDS and SAS scores were lower in the study group than in the control group after the intervention (P < 0.05), confirming that teach-back health education and structured psychological care can effectively alleviate depression and anxiety in <sup>99m</sup>Tc-3PRGD2.SPECT/CT examinees; this is extremely important for maintaining a stable heart rate and blood pressure during the periprocedural period.

Traditional health education is transmitted unidirectionally from staff to intervention subjects, with insufficient interactivity, and in too uniformed and simplified a manner. Hence, it is difficult to stimulate the interest and enthusiasm of intervention subjects for learning, and the patient's learning and mastery are not assessed in a timely manner after the intervention [12,13]. At the same time, an "amnesia curve" occurs during memory, and routine health education leads to difficulties in effectively mastering the health information provided. In contrast, teach-back health education adopts a two-way information exchange through the patient restatement and expression of the health education content; in this exchange, staff can assess the patient's mastery and provide subsequent targeted interventions to ensure that there is an improvement in the subjects' enthusiasm and efficiency in learning. This occurs through the process of continuous strengthening and correction, which not only deepens their mastery of health knowledge, but also reduces the rate of amnesia[14,15]. In addition, psychological care also plays an important role in patients examined by SPECT-CT. Structured psychological nursing is a new clinical comprehensive nursing intervention model based on routine psychological nursing combined with other psychological nursing skills that allows nurses to implement interventions aimed at solving



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Table 1 Comparison of general data between the two groups, n (%)					
Indicators	Study group ( <i>n</i> = 45)	Control group ( <i>n</i> = 45)	<i>P</i> value		
Gender (M/F)	24/21	26/19	> 0.05		
Age (yr)	$47.62 \pm 16.05$	48.13 ± 14.69	> 0.05		
Education			> 0.05		
Primary school and below	12 (26.67)	10 (22.22)			
Junior high school and high school	21 (46.67)	24 (53.33)			
College or above	12 (26.67)	11 (24.44)			

#### Table 2 Comparison of heart rate and blood pressure between the two groups (mean ± SD)

Time	Indicators	Study group ( <i>n</i> = 45)	Control group ( <i>n</i> = 45)	P value
Before inspection	Heart rate (beats/min)	88.58 ± 6.74	89.42 ± 7.09	> 0.05
	Diastolic blood pressure (mmHg)	89.21 ± 5.35	88.37 ± 6.44	> 0.05
	Systolic blood pressure (mmHg)	128.06 ± 7.99	$130.14 \pm 8.35$	> 0.05
In Inspection	Heart rate (beats/min)	93.11 ± 6.95	$104.45 \pm 7.37$	< 0.05
	Diastolic blood pressure (mmHg)	93.69 ± 6.14	$100.15 \pm 7.02$	< 0.05
	Systolic blood pressure (mmHg)	132.25 ± 7.67	139.63 ± 8.05	< 0.05
After inspection	Heart rate (beats/min)	91.08 ± 7.32	95.96 ± 9.05	< 0.05
	Diastolic blood pressure (mmHg)	92.11 ± 6.48	95.06 ± 5.52	< 0.05
	Systolic blood pressure (mmHg)	$131.42 \pm 6.64$	136.65 ± 5.71	< 0.05

Table 3 Comparison of depression and anxiety between the two groups (mean ± SD, points)					
Time	Indicators	Study group ( <i>n</i> = 45)	Control group ( <i>n</i> = 45)	P value	
Before inspection	SDS	$62.42 \pm 6.01$	63.06 ± 5.64	> 0.05	
	SAS	$61.79 \pm 5.45$	$62.29 \pm 6.37$	> 0.05	
After inspection	SDS	$41.15 \pm 4.51$	$46.05 \pm 5.07$	< 0.05	
	SAS	$42.46 \pm 5.19$	47.71 ± 5.62	< 0.05	

SDS: Self-rating depression scale; SAS: Self-rating anxiety scale.

Table 4 Comparison of test fit between the two groups, n (%)					
Group	Number of cases	Complete fit	Basic fit	Uncooperative	Check fit
Study group	45	31 (68.89)	13 (28.89)	1 (2.22)	44 (97.78)
Control group	45	27 (60.00)	11 (24.44)	7 (15.56)	38 (84.44)
<i>P</i> value					< 0.05

negative emotions and adverse psychological states of patients during diagnosis and treatment[16]. Compared with routine psychological nursing, structured psychological nursing can refer to the actual situation of patients analyzed for various parameters to meet their overall nursing needs as much as possible. Further, the patients and their families can participate in clinical nursing activities during the intervention[17].

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Table 5 Comparison of intervention satisfaction between the two groups, n (%)					
Group	Number of cases	Very satisfied	Generally satisfied	Not satisfied	Total satisfaction
Study group	45	30 (66.67)	13 (28.89)	2 (4.44)	43 (95.56)
Control group	45	25 (55.56)	12 (26.67)	8 (17.78)	37 (82.22)
P value					< 0.05

# Effects of teach-back health education and structured psychological nursing on examination cooperation

The results of this study showed the examination cooperation was higher in the study group (97.78%) than in the control group (84.44%) (P < 0.05), confirming that teach-back health education and structured psychological care have a high application value in patients undergoing 9mTc-3PRGD2.S-PECT/CT examination. This can effectively relieve the depression and anxiety of patients and improve their cooperation during the procedure. Moreover, it is extremely important to maintain the stability of heart rate and blood pressure during the periprocedural period. The main reasons for this analysis were as follows: (1) teach-back health education is a patient-centered, flexible, and diverse form of education, and can be used to provide health education in appropriate forms. The nursing staff determines the patient's mastery of health knowledge through effective assessment and timeously detects deviations and cognitive deficiencies, so as to provide a targeted follow-up. At the same time, teach-back health education can strengthen the patient's memory, improve learning efficiency, reduce forgetfulness, and help patients to comprehensively master health education knowledge through repeated questioning, error correction, emphasis, and guidance, thus helping them realize the importance of the examination and encourage them to actively cooperate with it. Teach-back health education can continuously improve the nursing content through a two-way interactive information transmission and evaluation of the effects. It can also improve the quality of care, correct the patient's wrong notions, encourage them to actively cooperate with the diagnosis process and treatment, change their coping style, and help them to actively face and cooperate with the examination [18-20]. Psychological support was used as the basis of the cognitive intervention, and health education and stress coping skills were organically integrated. Before the intervention, a good relationship was first established with the patients, the characteristics of the patients were fully considered, and a psychological intervention program was targeted to alleviate fear, anxiety, tension, and other psychological factors in the patients, so that they could undergo the examination in a state of physical and mental relaxation and ensure safety.

# Effect of teach-back health education and structured psychological nursing on intervention satisfaction

The results of this study also showed that the rate of satisfaction with the intervention in the study group (95.56%) was higher than that in the control group (82.22%) (P < 0.05), thus indicating that teachback health education combined with structured psychological care could also effectively improve the satisfaction of patients undergoing <sup>99m</sup>Tc-3PRGD2.SPECT/CT examination by relieving negative emotions, maintaining a stable blood pressure and heart rate, and ensuring a smooth and stable examination process. At the same time, structured psychological care - based on psychological support combined with other types of psychological intervention techniques, and effectively combined with stress treatment, health education, and coping skills - helped nurses to patiently deal with patients' adverse emotions during treatment. This helped to improve patient satisfaction.

#### CONCLUSION

In summary, this study showed that the combined use of teach-back health education and structured psychological care for <sup>99m</sup>Tc-3PRGD2.SPECT/CT examination can improve the cooperation of patients during the examination, alleviate negative emotions, maintain stable blood pressure and heart rate, and lead to high patient satisfaction. However, the sample size was small, and whether the study results can be generalized still needs to be confirmed by further exploration. In the future, the sample size should be expanded, the uniformity and thoroughness of the experimental design could be improved, and more objective and effective evaluation criteria can be used to confirm the effectiveness and feasibility of this nursing model and promote its wide application in clinical practice.

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#### **ARTICLE HIGHLIGHTS**

#### Research background

<sup>99m</sup>Tc-3PRGD2.SPECT/CT has many advantages, such as ease of operation, and plays an important role in clinical practice.

#### **Research motivation**

Effective care during the examination is critically needed.

#### Research objectives

We want to explore the value of teach-back health education combined with structured psychological nursing intervention.

#### Research methods

Total 90 patients undergoing 99mTc-3PRGD2.SPECT/CT examinations were divided into a study group and a control group according to a simple random number table.

#### Research results

The degree of cooperation and the satisfaction rate with the intervention was higher in the study group than in the control group.

#### **Research conclusions**

Teach-back health education combined with structured psychological nursing can improve the satisfaction and cooperation of patients undergoing <sup>99m</sup>Tc-3PRGD2.SPECT/CT examinations.

#### Research perspectives

The sample size should be expanded, the uniformity and thoroughness of the experimental design could be improved, and more objective and effective evaluation criteria.

#### FOOTNOTES

Author contributions: Gong WN, and Li XB designed the research study; Gong WN performed the research; Zhang YH contributed new reagents and analytic tools; Niu J analyzed the data and wrote the manuscript; and all authors have read and approve the final manuscript.

Institutional review board statement: The study was reviewed and approved by the Jincheng People's Hospital Institutional Review Board.

Informed consent statement: All study participants provided informed written consent prior to study enrollment.

Conflict-of-interest statement: None conflict of interest.

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#### REFERENCES

- 1 Mohd Rohani MF, Zanial AZ, Suppiah S, Phay Phay K, Mohamed Aslum Khan F, Mohamad Najib FH, Mohd Noor N, Arumugam M, Amir Hassan SZ, Vinjamuri S. Bone single-photon emission computed tomography/computed tomography in cancer care in the past decade: a systematic review and meta-analysis as well as recommendations for further work. Nucl Med Commun 2021; 42: 9-20 [PMID: 33165258 DOI: 10.1097/MNM.00000000001306]
- 2 Elsayed M, Loya M, Galt J, Schuster DM, Bercu ZL, Newsome J, Brandon D, Benenati S, Behbahani K, Duszak R, Sethi I, Kokabi N. Same day yttrium-90 radioembolization with single photon emission computed tomography/computed tomography: An opportunity to improve care during the COVID-19 pandemic and beyond. World J Gastrointest Oncol 2021; 13: 440-452 [PMID: 34040704 DOI: 10.4251/wjgo.v13.i5.440]
- England RW, Sheikhbahaei S, Solomon AJ, Arbab-Zadeh A, Solnes LB, Bronner J, Johnson PT. When More Is Better: 3 Underused Advanced Imaging Exams That Can Improve Outcomes and Reduce Cost of Care. Am J Med 2021; 134: 848-853.e1 [PMID: 33819488 DOI: 10.1016/j.amjmed.2021.02.020]
- Seniaray N, Verma R, Ranjan R, Belho E, Mahajan H. Comprehensive Functional Evaluation of the Spectrum of Multi-System Atrophy with <sup>18</sup>F-FDG PET/CT and <sup>99m</sup>Tc TRODAT-1 SPECT: 5 Year's Experience from a Tertiary Care Center. Ann Indian Acad Neurol 2021; 24: 490-494 [PMID: 34728939 DOI: 10.4103/aian.AIAN\_1222\_20]
- Gøeg KR, Elberg PB, Højen AR, Eskildsen UL. SNOMED CT as Reference Terminology in the Danish National Home 5 Care Documentation Standard. Stud Health Technol Inform 2017; 235: 461-465 [PMID: 28423835]
- Holman CK, Weed LD, Kelley SP. Improving Provider Use of the Teach-Back Method. J Nurses Prof Dev 2019; 35: 52-6 53 [PMID: 30608325 DOI: 10.1097/NND.00000000000521]
- Scott C, Andrews D, Bulla S, Loerzel V. Teach-Back Method: Using a Nursing Education Intervention to Improve 7 Discharge Instructions on an Adult Oncology Unit. Clin J Oncol Nurs 2019; 23: 288-294 [PMID: 31099800 DOI: 10.1188/19.CJON.288-294]
- Ye J. Advancing Mental Health and Psychological Support for Health Care Workers Using Digital Technologies and Platforms. JMIR Form Res 2021; 5: e22075 [PMID: 34106874 DOI: 10.2196/22075]
- Brambilla M, Cannillo B, D'Alessio A, Matheoud R, Agliata MF, Carriero A. Patients undergoing multiphase CT scans and receiving a cumulative effective dose of  $\geq$  100 mSv in a single episode of care. Eur Radiol 2021; **31**: 4452-4458 [PMID: 33449187 DOI: 10.1007/s00330-020-07665-0]
- 10 Yao L, Petrosyan A, Fuangfa P, Lenchik L, Boutin RD. Diagnosing sarcopenia at the point of imaging care: analysis of clinical, functional, and opportunistic CT metrics. Skeletal Radiol 2021; 50: 543-550 [PMID: 32892227 DOI: 10.1007/s00256-020-03576-9]
- 11 Roseland ME, Shankar PR, Houck G, Davenport MS. Targeting Missed Care Opportunities Using Modern Communication Methods: A Quality Improvement Initiative to Improve Access to CT and MRI Appointments. Acad Radiol 2022; 29: 395-401 [PMID: 33762152 DOI: 10.1016/j.acra.2021.03.008]
- Cutilli CC. Excellence in Patient Education: Evidence-Based Education that "Sticks" and Improves Patient Outcomes. 12 Nurs Clin North Am 2020; 55: 267-282 [PMID: 32389259 DOI: 10.1016/j.cnur.2020.02.007]
- 13 Shersher V, Haines TP, Sturgiss L, Weller C, Williams C. Definitions and use of the teach-back method in healthcare consultations with patients: A systematic review and thematic synthesis. Patient Educ Couns 2021; 104: 118-129 [PMID: 32798080 DOI: 10.1016/j.pec.2020.07.026]
- Anderson KM, Leister S, De Rego R. The 5Ts for Teach Back: An Operational Definition for Teach-Back Training. 14 Health Lit Res Pract 2020; 4: e94-e103 [PMID: 32293689 DOI: 10.3928/24748307-20200318-01]
- Bodenheimer T. Teach-Back: A Simple Technique to Enhance Patients' Understanding. Fam Pract Manag 2018; 25: 20-15 22 [PMID: 29989780]
- 16 Arnaboldi P, Oliveri S, Vergani L, Marton G, Guiddi P, Busacchio D, Didier F, Pravettoni G. The clinical-care focused psychological interview (CLiC): a structured tool for the assessment of cancer patients' needs. Ecancermedicalscience 2020; 14: 1000 [PMID: 32153655 DOI: 10.3332/ecancer.2020.1000]
- 17 Baker C, Rose ML, Ryan B, Worrall L. Barriers and facilitators to implementing stepped psychological care for people with aphasia: Perspectives of stroke health professionals. Top Stroke Rehabil 2021; 28: 581-593 [PMID: 33232219 DOI: 10.1080/10749357.2020.1849952
- 18 Talevski J, Wong Shee A, Rasmussen B, Kemp G, Beauchamp A. Teach-back: A systematic review of implementation and impacts. PLoS One 2020; 15: e0231350 [PMID: 32287296 DOI: 10.1371/journal.pone.0231350]
- 19 Yen PH, Leasure AR. Use and Effectiveness of the Teach-Back Method in Patient Education and Health Outcomes. Fed Pract 2019; 36: 284-289 [PMID: 31258322]
- 20 Klingbeil C, Gibson C. The Teach Back Project: A System-wide Evidence Based Practice Implementation. J Pediatr Nurs 2018; 42: 81-85 [PMID: 30219303 DOI: 10.1016/j.pedn.2018.06.002]



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