

PSYCHOLOGICAL PREPARATION MODEL USING HYPNOSIS APPROACH FOR PATIENTS BEFORE GASTROINTESTINAL ENDOSCOPY

Tintin Sukartini¹, Nursalam Nursalam¹, Erna Dwi Wahyuni¹, Ratri Ismiwiranti¹

¹Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia

ABSTRACT

Readiness of patients in endoscopic care is determined by the preparation received before the procedure. The purpose of this research was to explore the psychological preparation that received by patients before endoscopic procedure. This study used qualitative research design with a case study approach. A total of 17 participants undergoing endoscopic examinations conducted indepth interviews on patient experiences related to psychological preparation by using semi-structured interview guidelines and recording. Data analysis using Colaizzi's analysis method. Three themes were obtained: (1) Information preparation was divided into preparatory and possible actions; (2) cognitive preparations contained the control of patient perception and focused on benefits; and (3) The set of actions with the behavior control

of the patient faces less unpleasant things. Patient experiences related to psychological preparation focus not only on bowel preparation, but also information availability. Adaptive coping before endoscopic procedure was improved by increasing cognitive knowledge.

Keywords: Gastrointestinal endoscopy, hypnosis, psychological preparation.

Correspondence:

Tintin Sukartini

Faculty of Nursing, Universitas Airlangga, Surabaya, Indonesia

tintin-s@fkip.unair.ac.id

INTRODUCTION

Gastrointestinal endoscopy is an examination conducted to determine abnormalities in the upper and lower gastrointestinal tract (1). These actions have a negative impact on patients in the form of anxiety related to preparation, procedures, environment and results (2,3). Anxiety that arises gives an understanding is caused by unoptimal patients need preparation. Nurses need to provide comprehensive nursing care (4). Evident from the results of preliminary studies conducted at the Endoscopy Unit in East Java, showed 89% of patients experienced anxiety and pain before endoscopy procedure. Other study showed 82.35% of patients experiencing anxiety, 64% felt post-action pain and 58.82% experienced changes hemodynamics. The patient stated that he needed a thorough preparation related to the description of the procedure and how to control the anxiety he experienced so that he was better prepared.

Less optimal preparation before endoscopy procedure causes anxiety and affect to the patient's readiness (5). High levels of anxiety experienced by patients can cause incomplete diagnostic or therapeutic processes, extreme pain, and difficulty in following the process of action. This phenomenon shows that patients need clear information related to the benefits, unpleasant conditions during the action and how to reduce anxiety and pain that is felt. Therefore the form of psychological preparation with a hypnotic approach not yet be explained

Anxiety is the most common obstacle experienced in endoscopic examination (7), from 52% of female with an average age of 56 years (out of 1316 respondents) showed an anxiety rate > 70 (high anxiety), seen from 3 indicators namely 18% caused by bowel preparation, 29% related procedure, and 28% related to procedure result. Endoscopic measures are often carried out without the use of sedation, this is related to the actions taken relatively quickly, safely and for cost efficiency and to reduce the side effects caused by the use of sedation (8,9). From several studies mentioned that in some countries do not use sedation in patients who will undergo endoscopic procedures for reasons of increased costs. In addition to cost reasons, the use of sedation carries risks: suppression in circulation, respiratory depression,

prolonged conscious recovery time and anterograde amnesia (10). This condition is controbuting to worsening anxiety before procedure. The aims of this study was to explore the psychological preparation that received by patients before endoscopic procedure.

METHODS

The research design used a qualitative case study research by collecting information in depth using various data collection procedures, over a certain period (11). This study aimed to explore the patient's experience related to psychological preparation provided by nurses before undergoing endoscopic examination. The steps taken were (1) evaluating the psychological preparations received by the patient before endoscopy is done through in-depth interviews and observations; (2) Determine the theme or topic of developing an intervention with a hypnosis approach; (3) Develop a psychological preparation module using a hypnosis approach through expert discussion related to a determined theme; (4) Establishing themes so as to produce a psychological preparation module with hypnosis approaches.

Participants in this study were 17 patients who underwent endoscopy both upper endoscopy and colonoscopy. With the criteria: (1) Adult patients (> 20 years old); (2) Able to communicate in Indonesian or regional languages that can be understood by researchers and participants; (3) stable hemodynamic conditions; (4) Patients did not get general anesthesia. The sample selection used a purposive sampling method, data collection tools were indepth interview guidelines, fields notes, and recording devices. Data analysis was conducted to find themes that were used as a basis for compiling modules, while the analysis steps used the Colaizzi method. The ethical approval in this study had received from the Health Research Ethics Commission of the Faculty of Nursing, Airlangga University with a letter number: 1306-KEPK, published on February 25, 2019.

RESULTS

Distribution Characteristic of Respondents

Participants in this study were 17 people who had undergone endoscopic procedures, with patients ranging in age from 21-78 years, consisting of 3 men and 14 women. Marital status,

consisting of 16 married and 1 unmarried person. The level of education of participants varies from not completing elementary school and their occupation were private participants, entrepreneurs, housewives and retirees.

Table 1. Theme, sub theme, category and keyword of psychological preparation

Theme	Sub theme	Category	Keyword
Information Preparation	Procedure Preparation	Bowel preparation EGD	Fasting
		Bowel preparation	Diet
		Colonoscopy	Extra drinking
			Purgative
		Tool	Imaging
		Environment	Do not make scared
			Family support
		Operator	Convincing
			Cooperative
			Critis
Cognitive control	Prosedure possibility	Sedation	Purpose
			Side eefect
	Benefit	Biopsy	Purpose
			Feedback
Behavior control	Unhappy Condition	Focus to benefit	Illness found
			Recovered
		Anticipation	Medicine
			Surrender
			Calm
	Distraction and relaxation		Motivation to surrender
			Sugestion
			Praying
			Focus to surrender
			Deep breathing
		Follow the instruction	
		Sleeping	
		Distraction	

Theme 1: Information preparation

Preparation of actions

Information about the preparation of endoscopic measures is given by health professionals to patients, which contains all information relating to procedures to improve patient readiness. Based on the results of the in-depth interview, participants explained the patient's understanding of the preparation of the actions that had been received and expected. In this sub-theme there are 5 categories identified, including information about: bowel preparation EGD, bowel preparation colonoscopy, procedures and tools, environment, and officers.

Bowel preparation for EGD

Before carrying out the EGD procedure patients get information about bowel preparation which must be done as a condition of the success of the action. Information categories about bowel preparation EGD that have been supported by the statement:

"Yes, I was told to fast ..." (P2)

"Yeah, first, yeah ... the endoscopy is told to fast first, then it is endoscoped." (P7)

"There is nothing ... just dikasik know just fasting" (P9)

From the results of the above statement it can be concluded that the patient obtains, understands and carries out information about bowel preparation EGD is required to fast before the procedure is carried out up to 1 hour after the procedure is carried out.

Bowel preparation colonoscopy

Participants state information about bowel preparation prior to the colonoscopy action that has been received from health professionals in accordance with the actions to be taken. The information category about bowel preparation colonoscopy that has been supported can be supported by the statement:

Fasting ... just drink ... liquid diet ... ask to drink a lot ... (P6)

"... before I entered it, I had a porridge diet first ... on Sunday, the milk diet ... then it was ... did not eat anything until I entered the room ... then continued dieting ... Then backward ... alternating back ... the pagine ... was beaten again ... Put it in again ... on the computer again ... but it's a good thing .. I don't eat anything "(P11)

"... Monday I ate porridge and continued to drink water on Tuesday ... liquid diet ... just milk ... I was only a liquid diet ... drinking milk until last night ... after that taking medicine mixed in a large bottle ... no dandruff ... yes a little wry ... how can I drink water ... then it comes out ... then ... yes wong we have eaten nothing, so yes water Then at 5 in the morning I put it down from the bottom ... and then what is it already nothing "(P17)

From the results of the above statement it can be analyzed that the patient obtains, understands and runs information about bowel preparation colonoscopy is having to go on a liquid diet, drink a lot, do an enema / colon cleansing process. clear information, control and evaluation carried out by nurses is very important. The success of bowel

preparation will greatly affect the success of the action process.

Procedure and Tools

Patients who will undergo endoscopy are often afraid of the procedure and related to the equipment to be used, this will affect the patient's readiness. categories of information about procedures and tools that have been obtained are supported by statements:

"Yes ... that is ... when it enters the mouth ... the device wants to enter" (P2)

"Heeh ... after knowing ... ooo ... the tool is here ... this ... here ... this is here ... there is a hollow ... means that the tool went in there ... so I know so you know" (P3)

"Yes, the picture of endoscopy is how it is done ... how it is how it feels ... how it hurts ... how does it ... then the results will be like that ... (P9)

Environment

Information related to the environment during the procedure is also needed by the patient. categories of information about the environment that has been obtained are supported by the statement:

"Family ... it's important to know what ... what did he say later ... his stomach is injured like that" (P7)

"... Just go into the room already excited ..." (P8)

"Yeah ... soale I'm tense ... Soale is still the first ... (laughing) ... the first one is reducing the stress into ... Opo I double-checked the balloon yo ... (hehehe) ... dadi ben happy ... opo setmo opo iku ... TV opo ... opo .. tense tenant soale ... ndokok iku ... spaneng ... indeed tense me ... "(P11)

From the above statement it can be examined that the patient needs information related to the environment in which the endoscopy procedure is performed, whether the patient may be accompanied by family and what is the description of the place of action if necessary the patient / family

Possible actions

Information about possible actions given to patients must be explained by health professionals in endoscopy, that is, all actions or situations that may arise or be carried out during the procedure so that patients are better prepared physically, psychologically and mentally and understand the benefits and side effects. In this sub-theme there are 2 categories identified, including information about sedation and biopsy.

Sedation

Information related to sedation that will be provided or may be provided during the action process by health professionals is needed to increase patient confidence, comfort and safety. information categories about sedation that have been obtained are supported by statements:

"I don't know ... (the patient's husband: when I got here, why here) ... how come here ..." (P6)

"If the first one was not injected ... then we could follow ... after arriving the disease was known to the doctor ... well, you know, the disease that covered our camera ... said the doctor ... could know if the condition realized ... then what I was using was yes I didn't hear anything ... did the doctor just say ... that doctor ... it hurts ... it hurts ... yes ... inhale slowly exhale slowly I see ... if that didn't feel ... sleepy ... "(P15)

From the above statement it can be analyzed that the patient needs to be given information about the possibility of sedation given during the patient undergoing the procedure. Patients need to know the purpose, benefits and side effects

that may be caused. So the patient can make a choice whether to use sedation or not or adapted to medical conditions and expert consultation.

Biopsy and follow-up results

Information related to the biopsy that will or may be carried out in the course of the action is needed to increase patient understanding, trust, comfort and safety. categories of information about biopsies that have been obtained are supported by statements:

"Then if the results of the biopsy are heavy ... will the surgery not be treated?" (P3)

"... not only the patient ... later arrived at home were also asked by neighbors ... sampean what illness ... cakna tumor ... then later had to say ... bogh ... mun not directly e operation mun tumor ... can it be ... like ... that ... that's the problem, ma'am ... if it's like this, you can explain "(P15)

From the above statement it can be analyzed that the patient also needs information about the possibility of a biopsy to be performed as well as the possible results to be obtained and the follow-up of the results and treatment. Endoscopic staff need to explain what is a biopsy, the purpose, benefits and side effects and follow-up that must be done by the patient.

Theme 2: Cognitive control

Benefits

Cognitive control given to patients must focus on the benefits of endoscopy so that it can reduce anxiety, and discomfort during endoscopic actions, which will result in positive coping for patients. In this sub-theme there are categories 1) profit focus and 2) anticipation.

Focus on profits

The focus category of the benefits gained is supported by the statement:

"I want it ... want to know the disease ... Then what do I do ... know for yourself ... just look ... not predictable anymore ... "(P1)

what if I do ... I am happy because the problem is that I can find it ... the one who used to guess was used to guess ... what is it ... after seeing the varicose veins how come I found it (P10)

From the above statement it can be analyzed that cognitive control related to the benefits of endoscopy needs to be done by helping patients to focus more on the benefits of endoscopic measures that will be done, this will increase patient confidence, provide positive coping and hope to increase patient readiness.

Anticipation

Anticipation made by patients as a form of positive control is needed. Anticipation categories that have been obtained are supported by statements:

"... do not ... be afraid ... try it already ... the pain does not exist ... maybe you look at the tool ... suggestion itself ... but it's okay ... it really doesn't hurt ... (P3)

"So that it is calmer ... helps to relax, surrender ..." (P9)

"No sister, I resigned to wanting to recover ..." (P10)

From the above statement it can be analyzed that patients need to be given cognitive control by anticipating what is less pleasant by giving positive suggestions, or calming themselves by remembering the importance of the benefits of endoscopy.

Behavior control

The theme of behavior control explains the patient's behavior or the patient's actions to reduce the negative effects felt by the patient in relation to endoscopy. This

theme was identified based on sub-themes about the control of unpleasant things.

Control unpleasant things

Relaxation distraction

This category of relaxation distraction is obtained by supporting the statement:

"Yes ... Told to swallow" (P4)

"Yes, the preparation must pray ... pray a lot ..." (P7)

"Yeah ... calm down ... long breaths mom ... yes my breath ... swallowed ma'am ... obedient ... no ta bere ta" (P11)

From the above statement it can be analyzed that distraction or diversion and relaxation that can be done by the patient will increase the feeling of comfort and calm for the patient, this will greatly affect the patient's confidence and confidence during the procedure which will ultimately increase the patient's readiness in undergoing all procedure procedures .

DISCUSSION

Information Control

In the information control theme, 2 sub themes were identified, including: preparation of actions and possible actions. Preparations of action that need to be given to patients before undergoing endoscopic procedures include bowel preparation according to the type of action (EGD / Colonoscopy), information related to the equipment, environment, and staff. Information related to possible actions includes sedation and biopsy as well as a follow-up plan. Sub themes related to one another in shaping the patient's ability to control information and improve understanding of endoscopic procedures. This sub-theme provides an overview of the process by which patients understand the information provided related to the endoscopic procedure that they will undergo. Based on the results of research on information control there is a gap between the information obtained and desired by participants. The participant's statement showed that the information obtained explained more about the preparation of actions related to bowel preparation. Information has not been given much attention regarding procedures, tools, staff environment and matters related to perceptions of endoscopic measures.

Information control is part of the psychological preparation that is given before a patient undergoes an endoscopic procedure. Information control needs to be given to patients before endoscopic action, in this phase nurses provide appropriate information related to endoscopic actions and make corrections to information obtained by previous patients (12). The communication skills of endoscopic nurses in providing information are needed to increase patient understanding and satisfaction (Deye, N., et al., 2015). Nurses need to apply effective communication in providing information to patients who will undergo endoscopic procedures. Effective communication needs to be applied when providing education before and after procedures to improve the quality of information provided (14).

Information control can be done by justifying and completing inaccurate or incomplete information. This information can be in the form of how the action was carried out, the time and duration required, as well as other general matters related to the procedure (15,16). Information controls that need to be given to endoscopic patients related to the procedure in undergoing the action, including time, duration, general conditions, as well as special things that occur during the procedure (17,18). Media that can be used in providing information is very diverse, nurses can use

books, leaflets, audio, video media (14,19). Previous studies have shown that the use of video information can improve patient understanding of actions while reducing anxiety and increasing patient satisfaction (Aarssen, L. W., & Crimi, L. (2016). The key to successfully receiving an information is communication. Nurses need to improve their communication skills. Nurses need to give specific time to patients who will undergo endoscopic action to provide information and preparation, which is done according to individual patient needs. Nurses also need to have convincing, and attractive performance to increase the success of information delivery (20).

The information provided by the nurse must facilitate the patient's healing process as well as atraumatic. Therapeutic communication used by nurses aims to: (1) help patients get clearer information, reduce the burden on feelings and thoughts and can take action to change the situation if the patient believes in what is needed, (2) reduce doubts, help in terms of take effective action and maintain the strength of his ego, (3) influencing others, the physical environment and himself. Good communication will be established if there is a good interaction between the endoscopy team and the patient (22).

Endoscopic nurses have a role to help patients understand about the actions that will be performed on patients. Patients need to be given adequate and accurate information control obtained from nurses and doctors who understand about endoscopy (23,24). Patients need to understand about the preparation of the action and the possibility of action. Preparation of action consists of: (1) what preparations they have to do according to the type of action, things that are recommended, heeded or prohibited, including what if something unexpected happens (vomiting, more severe pain) during the preparation process; (2) detailed description of procedures and tools. This information is very much needed

Cognitive Control

Cognitive control in psychological preparation identified one sub-theme, namely benefits. Cognitive control that is needed to be given to patients in terms of benefits is the focus of the benefits of the examination and anticipation that can be done by the patient through patient perception. These themes and sub themes are interrelated with previous themes and sub themes to form psychological preparation (25,26). From the results of this study it was found that in patients who had undergone repeated endoscopic procedures, stated that the negative perception felt was mainly due to fear of the action to be performed. The participants stated that cognitive control can be done by building positive coping, namely by focusing on the benefits to be gained from endoscopic actions that will be carried out by focusing on profits and making anticipatory efforts.

The participants stated that by focusing on the benefits of which include: disease will be found, will get a cure, and the treatment given right will increase the confidence and confidence of patients to take action. Patients who first undergo an endoscopy procedure mostly have negative perceptions about endoscopy. Often the endoscopy team does not pay attention to the anxiety and pain that is felt associated with endoscopy (27). Cognitive control is very dependent on the patient's ability to perceive what he is facing.

Cognitive control for patients undergoing endoscopic action is to help patients overcome distortions of perception perceived by the patient, and help patients to control their cognitive abilities in a more positive direction such as, focusing on the benefits of the actions and positive aspects contained in things that are not unpleasant and negative

aspects of action (25,28). The results of this study are in line with previous research and existing theories that cognitive control is done by explaining to patients about the benefits, advantages and unpleasant things of action, the results of the study add aspects of anticipation with resignation, calm, willingness to heal and self-suggestion, when patients have realized and understood the benefits of the action so the patient will have anticipation with resignation, calm during carrying out the action and be able to suggest themselves. If the patient is able to exercise cognitive control well, the patient will find it easier to capture and follow the directions given by the endoscopy team, so that the procedure will run smoothly.

The endoscopy team, especially nurses, need to help patients to carry out cognitive control in a positive direction by looking more at the benefits of the actions taken so that patients exhibit positive perceptions and behaviors by following all the directions given by the endoscopy team so that the success of the action can be optimal.

Behavior Control

In this study the behavior control themes were identified by 1 sub-theme, which are things that are not pleasant. Unpleasant things or negative effects imagined by the patient related to the action will greatly affect the patient's readiness. The results of this study indicate that participants successfully complete actions when they are able to control behavior by distraction and relaxation. The efforts that the participants did included praying, focusing on healing, deep breathing, following directions, asking to be put to sleep and being forgotten.

From the results of previous studies show that patients do behavioral control indicated by behavioral control methods including breathing exercises, distraction techniques, and how to use them to overcome anxiety experienced (29). Behavioral intervention that can be taught to patients before undergoing examination can also be in the form of (1) deep breathing, (2) swallowing practice with an open mouth, (3) practice putting the tongue (30,31).

One effective control behavior is done to reduce anxiety in patients and increase success is by conversational hypnosis (29,32). Hypnosis has been widely used as an intervention to reduce the use of risky anesthesia in patients with gastrointestinal endoscopy, reduce anxiety, pain and increase anxiety of patients undergoing medical or surgical procedures (23,24). The meta-analysis conducted showed that hypnosis had higher efficacy compared to other psychological interventions (33).

Of the three themes found in this study showed the relationship to each other. psychological intervention is a series of three themes that have been found that cannot be separated from one another. Information control needs to be provided to patients to improve cognitive control and establish behavioral control. Psychological preparation that is optimized by increasing control on the three themes found will increase patient readiness in dealing with endoscopic procedures (34,35). Psychological preparation given to patients is shown to build psychological patients, namely the readiness of patients in dealing with actions, but in the implementation of the field by making psychological preparations, the patient will be ready physically, mentally, emotionally, needs and knowledge.

Increasing the effectiveness of psychological preparation can be done by using psychological therapy, one of which is hypnosis (34,35). Psychological preparation using hypnosis approach is expected to be able to help patients to more easily receive information, have a positive perception, focus on the benefits of action and patients undergoing actions

with relaxation, minimal anxiety and pain, minimal risk, and stable hemodynamics. This study has limitations described as follows: (1) Psychological conditions (mood) of patients after actions that can not be controlled and affect the participants' answers. (2) This study did not assess the patient's anxiety level only multiplied the anxiety response from in-depth interviews.

CONCLUSION

Patient preparation before endoscopy was important thing that needs attention from healthcare. Preparations that need to be given were cognitive preparation and information needs including preparation of action.

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