

Research Article

Snyder Hopes the Effect of Theoretical Nursing Combined with Adaptive Cognitive Emotion Regulation Strategy on Cirrhotic Patients with Esophageal Variceal Bleeding

Yinrong Ding^{*} 

Department of Gastroenterology, First Affiliated Hospital of Wenzhou Medical University, Wenzhou, China

Abstract

Explore the effect of Snyder hope theory nursing combined with adaptive cognitive emotion regulation strategy on hope level, psychological elasticity, response and negative emotion regulation ability of cirrhotic patients with esophagogastric variceal bleeding. 120 patients with liver cirrhosis with esophagogastric variceal bleeding from January to December 2023 were randomly divided into observation group (n = 60) and control group (n = 60). The control group was given the strategy of adaptive cognitive emotion regulation. The observation group was given hope theory nursing combined with adaptive cognitive emotion regulation strategy. After nursing, the scores of Herth hope scale (C-HHI), psychological resilience scale (CD-RISC), face dimension, avoidance and surrender in the observation group were higher than those in the control group ($P < 0.05$, 0.05). The scores of negative emotion regulation scale (NMR-S) in the observation group were higher than those in the control group. Snyder hopes that theoretical nursing combined with adaptive cognitive emotion regulation strategy can improve the hope level of cirrhotic patients with esophagogastric variceal bleeding, improve their psychological resilience and coping style, and improve their negative emotion regulation ability.

Keywords

Snyder Hope Theory, Adaptive Cognitive Emotion Regulation, Esophagogastric Variceal Bleeding, Level of Hope, Coping Style, Negative Emotion Regulation

1. Introduction

Variceal bleeding of esophagus and gastric fundus (esophagogastric variceal bleeding, EGVB) is one of the most common complications of liver cirrhosis and the main cause of death in patients with liver cirrhosis. Although significant progress has been made in the treatment of EGVB in recent years, more than 60% of patients still bleed again within one year, and 15% of 20% of patients die within 6 weeks of rebleeding. Patients with liver cirrhosis are prone to

depression and anxiety due to prolonged illness and high EGVB rebleeding rate and mortality. These negative emotions can inhibit the immune function of the body and reduce the enthusiasm and compliance of patients with treatment. Therefore, it is particularly important to improve the treatment compliance of EGVB patients, mobilize the subjective initiative of their participation quality, and improve their psychological state. Snyder hope theory [3] includes four

^{*}Corresponding author: dingyinrong@163.com (Yinrong Ding)

Received: 22 October 2024; **Accepted:** 5 November 2024; **Published:** 22 November 2024



Copyright: © The Author(s), 2024. Published by Science Publishing Group. This is an **Open Access** article, distributed under the terms of the Creative Commons Attribution 4.0 License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

aspects: education, goal, path thinking and dynamic thinking. Nursing intervention based on this theory can promote patients to have a positive impact, maintain hope and improve bad emotions. Cognitive emotion regulation strategy [4] refers to the cognitive efforts made by individuals to deal with the requirements of internal and external environment and related emotional distress. Individuals adopting effective cognitive emotion regulation strategies can not only reduce negative emotions, reduce the level of psychological stress in the face of negative events, but also reduce psychological trauma and maintain an optimistic and positive attitude. Cognitive emotion regulation strategies are divided into adaptive cognitive emotion regulation strategies and non-adaptive cognitive emotion regulation strategies. Adaptive emotion regulation strategies include acceptance, positive re-attention, new concern plan, positive re-evaluation and rational analysis [5]. However, it is hoped that the research on the effect of theoretical nursing combined with adaptive cognitive emotion regulation strategies on patients with chronic diseases is relatively insufficient. The purpose of this study was to explore the effect of hope theory nursing combined with adaptive cognitive emotion regulation strategy on hope level, psychological elasticity, coping style and emotion regulation ability of cirrhotic patients with EGVB.

2. Materials and Methods

2.1. Materials of Study

One hundred and twenty patients from January 2023 to December 2023 from the first affiliated Hospital of Wenzhou Medical University were selected as subjects. The inclusion criteria were as follows: 1 to meet the diagnostic criteria of hepatitis B cirrhosis [6], EGVB diagnostic criteria [7] and "guidelines for prevention and treatment of esophagogastric variceal bleeding in cirrhotic portal hypertension" [8]; age ≥ 18 years old 3The patients recovered well after endoscopic treatment during hospitalization. Exclusion criteria: 1 there were serious complications, such as hepatic encephalopathy, ascites, 2 serious somatic diseases such as heart, lung, kidney and so on. According to the principle of comparability of basic materials between groups, 120 patients were divided into observation group ($n = 60$) and control group ($n = 60$). In the observation group, there were 48 males and 12 females, with an average age of 52.30 ± 8.17 years, endoscopic variceal ligation ($n = 34$), endoscopic variceal sclerosis ($n = 15$), endoscopic tissue adhesive injection ($n = 11$), Child-Pugh grade ABC ($n = 16$), 36 cases and 8 cases respectively. In the control group, there were 44 males and 16 females, with an average age of 52.45 ± 6.48 years, endoscopic variceal ligation ($n = 36$), endoscopic variceal sclerosis ($n = 14$), endoscopic tissue adhesive injection ($n = 10$), Child-Pugh grade ABC ($n = 18$), 36 cases and 6 cases respectively. There was no significant difference in the general data of patients with esophagogastric varices bleeding be-

tween the two groups ($P > 0.05$). This study was approved by the Medical Ethics Committee (ethics code: KY2022-187).

2.2. Method

2.2.1. Control Group Given Adaptive Cognitive Emotion Regulation Strategies

(1) Collective emotion regulation training, organizing patients to conduct cognitive reevaluation strategy training, location selection: ward meeting room, the environment is required to be quiet and comfortable; time: three times a week, arranged at 5: 00 p.m. on Mondays, Wednesdays and Fridays. There are six courses in one section each time, which are understanding self-emotion, understanding cognitive reassessment strategies and methods, cognitive reassessment of self-application, changing unreasonable beliefs and constructing individual support system. (2) individual intervention training, in which the responsible nurses provide one-to-one guidance to the patients to solve the problems encountered by the patients in the cognitive reassessment training; build the Wechat official account platform, upload each session of collective learning resources, relaxation training videos and audio (respiratory relaxation training, progressive muscle relaxation training, meditation training, etc.), requiring patients to choose a section to study every day and choose a relaxation way to train.

2.2.2. Observation Group on the Basis of the Control Group, Combined with the Nursing Intervention Strategy of Hope Theory

(1) Training of team members: set up a professional nursing group, which includes psychiatrists, nurses in the department of gastroenterology and psychological counselors, to train them in professional knowledge, and to divide their work responsibilities, exchange information with each other and summarize the work. Five chief nurses with professional titles who had worked in our department for more than 6 years were selected as responsible nurses, and the psychotherapists in our hospital trained and assessed the team members for one week. The contents of training and nuclear examination include the connotation, methods and steps of hope theory. You can participate in the research only after passing the examination. The responsible nurse is responsible for the specific implementation of the strategy of cognitive emotion regulation in the hope of theoretical nursing combined with adaptability in the process of research.

(2) Evaluation of hope level: the responsible nurse conducted face-to-face communication with patients for 30 minutes to understand the patients' awareness of their own disease and the level of hope for the disease, and the evaluation ran through the whole research process. When the patient's hope level changes, optimize nursing measures in time.

(3) It is hoped that the implementation of nursing inter-

vention: 1 Health education: explain in detail to patients and their families the causes of liver cirrhosis, the symptoms and signs of esophageal and gastric varices bleeding, the principle of endoscopic treatment and the prevention of rebleeding in the form of picture and text combined with video playback. The importance of regular use of antiviral drugs and outpatient follow-up was emphasized, and there was a periodic pause during the broadcast process. Answer what the patients do not understand and correct their misunderstandings. 2 to determine the ideal shape of nursing State: the intervention group identified the patients with esophagogastric variceal bleeding through literature search and summary. The ideal state of nursing care for patients with endoscopic therapy, including active cooperation with hemostatic therapy, reasonable diet, Regular work and rest, regular medication, regular re-examination, emotional stability and so on. 3 goal: press According to the ideal state of nursing, combined with the actual situation of patients to set short-term and long-term goals. Near The target for example: patients who do not understand esophageal and gastric variceal bleeding are set to "fully understand." Related knowledge and treatment points of esophagogastric variceal bleeding "; setting of patients with mood swings For "mastering rational emotion regulation strategy" and so on. Short-term goals vary from person to person, while long-term goals are unified. In order to achieve the ideal state of nursing. Path thinking: help patients analyze what exists in the achievement of goals Obstacles, looking for ways to achieve the goal, and establishing path thinking. For example, for "fully understand food." With the goal of "related knowledge and treatment of gastric variceal bleeding", path thinking is to promote Patients correctly understand the related knowledge and treatment points of esophagogastric variceal bleeding, and establish path thinking. According to the patient's age, educational background, cognitive level, etc., we should use easy-to-understand language. Combined with pictures or videos for education, targeted explanation of places that patients do not understand, and so on. 5 move Strong thinking: the release of patients' confidence can be enhanced by carrying out patient friends' meetings and establishing patient communication groups. It actively participates in the realization of short-term and long-term goals.

2.3. Observation Indicators

(1) Hope level: Herth Hope scale (C-HHI) was used to evaluate the hope level of patients before nursing and 3 months after nursing care [9]. The scale included 3 dimensions and 12 items. Using the Likert4 score, each item was scored 1-4 points. The total score is 1248, and the higher the score, the higher the patient's expectation level.

(2) Psychological resilience: using the psychological resilience scale (Conner-Davidson). Resilience Scale, CD-RISC) to evaluate the psychological resilience of the two groups before and after intervention. CD-RISC includes

three dimensions of tenacity, self-improvement and optimism, 25 questions, with a total score of 100. the score is positively correlated with the psychological resilience of the patients [10].

(3) Coping style: medical coping questionnaire (medical coping modes questionnaire, MCMQ) was used to evaluate the response of two groups of patients to esophagogastric variceal bleeding. MCMQ included 20 questions in three dimensions: facing (8 questions, 832 points), submission (5 questions, 520 points) and avoidance (7 questions, 7-28 points). The scores of facing dimensions were positively correlated with patients' positive coping, while the scores of submission and avoidance dimensions were negatively correlated with patients' positive coping styles.

(4) Emotion regulation ability: the negative emotion regulation ability scale (Negative Mood Regulation Scale, NMR-S) was used to evaluate the patients' emotion regulation ability before and after intervention, including general regulation ability, negative emotion cognitive regulation ability and negative emotion behavior regulation ability. there were 10 items in each dimension. The higher the score, the stronger the ability of negative emotion regulation [11].

2.4. Data Analysis Methods

SPSS26.0 statistical software was used to process the data. The measurement data were expressed as "mean \pm standard deviation", and the mean between groups was compared by t-test. $P < 0.05$ as the difference has statistical meaning.

3. Results

3.1. Comparison of C-HHI Scores Between the Two Groups

Comparison of scores of positive attitude, positive action and intimate relationship between the two groups before nursing There was no significant difference ($P > 0.05$), but the scores of positive attitude, positive action and intimate relationship in the observation group were significantly higher than those in the control group ($P < 0.05$). See Table 1.

3.2. Comparison of CD-RISC Scale Scores Between the Two Groups

Before nursing, there was no significant difference in the scores of tenacity, self-improvement and optimism between the two groups, but after nursing, the scores of all dimensions of CD-RISC scale in the observation group were significantly higher than those in the control group. See Table 2.

3.3. Comparison of Coping Styles Between the Two Groups

There was no significant difference in the scores of face, avoidance and surrender before nursing ($P > 0.05$), but after nursing, the scores of patients in the observation group were higher than those in the control group, while the scores of avoidance and submission in the observation group were lower than those in the control group ($P < 0.05$). The difference was statistically significant ($P < 0.05$). See [Table 3](#).

3.4. Comparison of NMR-S Score Between the Two Groups

There was no significant difference in the scores of all dimensions of NMR-S between the two groups before nursing, but after nursing, the scores of all dimensions of NMR-S in the observation group were significantly higher than those in the control group. See [Table 4](#).

Table 1. Comparison of C-HHI scores between the two groups (scores).

Group	No.	Positive attitude		Intimate relationship		Positive action		Herth wants the total score.	
		Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing
Control group	60	9.72 \pm 3.43	9.82 \pm 2.97	10.02 \pm 2.84	10.23 \pm 3.22	9.88 \pm 3.37	10.00 \pm 3.33	29.62 \pm 7.19	30.05 \pm 7.94
Observation group	60	9.90 \pm 3.25	11.25 \pm 3.53	9.98 \pm 3.32	11.78 \pm 3.50	10.37 \pm 3.30	11.90 \pm 3.59	30.25 \pm 7.16	34.93 \pm 9.93
<i>t</i>		-0.301	-2.41	0.059	-2.526	-0.794	-3.005	-0.484	-2.975
<i>p</i>		0.764	0.017*	0.953	0.013*	0.429	0.003**	0.629	0.004**

Table 2. Comparison of CD-RISC scores between the two groups (scores).

Group	No.	Tenacity		Self-improvement		Optimism		Total score of CD-RISC	
		Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing
Control group	60	20.52 \pm 6.66	19.82 \pm 6.70	32.22 \pm 10.21	32.77 \pm 10.99	9.62 \pm 3.63	9.95 \pm 3.71	64.97 \pm 20.66	65.28 \pm 21.79
Observation group	60	19.77 \pm 5.94	24.72 \pm 3.56	31.78 \pm 9.19	40.52 \pm 6.29	10.13 \pm 3.08	12.20 \pm 2.61	64.28 \pm 18.27	80.65 \pm 11.58
<i>t</i>		0.651	-5.001	0.244	-4.74	-0.84	-3.845	0.192	-4.824
<i>p</i>		0.516	0.000**	0.807	0.000**	0.403	0.000**	0.848	0.000**

Table 3. Comparison of MCMQ scores between the two groups (scores).

Group	No.	Face		Yield		Evade	
		Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing
Control group	60	19.15 \pm 5.83	19.32 \pm 5.69	12.75 \pm 3.86	12.92 \pm 4.01	18.93 \pm 5.69	18.30 \pm 5.25
Observation group	60	19.67 \pm 5.75	22.20 \pm 5.90	13.47 \pm 3.95	9.82 \pm 3.37	19.27 \pm 5.27	14.55 \pm 4.77

Group	No.	Face		Yield		Evade	
		Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing
<i>t</i>		-0.489	-2.725	-1.005	4.586	-0.333	4.093
<i>p</i>		0.626	0.007**	0.317	0.000**	0.740	0.000**

Table 4. Comparison of NMR-S scores between the two groups (scores).

Group	No.	General regulating ability		Cognitive regulation ability of negative emotion		Negative emotional behavior regulation	
		Before nursing	After nursing	Before nursing	After nursing	Before nursing	After nursing
Control group	60	34.32±10.12	32.57±9.76	33.55±10.89	33.20±9.40	34.65±9.80	35.55±10.01
Observation group	60	35.03±8.79	39.27±6.36	33.23±10.06	38.02±7.60	35.62±8.93	39.68±5.70
<i>t</i>		-0.414	-4.456	0.166	-3.087	-0.565	-2.779
<i>p</i>		0.68	0.000**	0.869	0.003**	0.573	0.007**

4. Discussion

4.1. Improve the Hope Level of Patients

The results of this study showed that after combined nursing, the scores of all dimensions of C-HHI in the two groups were higher than those before nursing, and the scores in the observation group were higher than those in the control group, indicating that the method of this study can effectively improve the hope level of patients and make them maintain a positive attitude. This may be related to the fact that nurses explain the relevant knowledge of liver cirrhosis EGVB to patients in this study, which is helpful to improve patients' cognition of EGVB rebleeding, improve their ability to distinguish their own diseases, mobilize patients' product polarity to treat diseases, improve their psychological state, and improve their confidence in treatment. Among the three elements of Snyder's hope theory, the goal is the core, the path belief is the procedure and specific measures to achieve the goal, and the will belief is the psychological driving force. These three elements influence each other, have positive significance for patients to form hope and maintain hope, and are very important to maintain hope.

4.2. Improve the Psychological Resilience of Patients

Psychological elasticity reflects the ability of patients to

use internal and external data to obtain positive value in the face of stress and difficulties [12]. The results of this study showed that after combined nursing, the score of psychological elasticity scale was 80.65 ±11.58 in the observation group and 65.28 ±21.79 in the control group ($P < 0.05$). It shows that the implementation of hope theoretical nursing combined with adaptive emotion regulation strategy can improve the psychological elasticity of liver cirrhosis patients with esophagogastric variceal bleeding. It is consistent with Li Xiaoyan [13] and Chen Yanyan [14]. Patients with liver cirrhosis with esophagogastric variceal bleeding are easily affected by disease de-certainty and poor symptom control, and are easy to produce negative emotions such as pessimism and hopelessness, which affect patients' treatment compliance and poor psychological flexibility. through the implementation of hope theory nursing combined with adaptive cognitive emotion regulation strategy, this study helps patients establish contact with medical team and family members. Help patients cope with changes and challenges in life, reduce the psychological burden of patients, make them feel family support, so as to enhance the psychological flexibility of patients.

4.3. Has a Positive Effect on the Change of Patients' Coping Style

The results showed that compared with the control group, the observation group had higher coping scores and lower avoidance and yield coping scores, indicating that theoretical nursing combined with adaptive cognitive emotion regula-

tion strategies had a positive impact on the change of patients' coping style. The analysis may be due to the hope that nursing combined with adaptive cognitive emotion regulation strategy can monitor the achievement of patients' goals every week, praise and reward patients who have achieved their goals, and can move on to the next stage of goals. increase their enthusiasm and self-confidence [15]. Improve patients' awareness of the disease at the same time, enhance their sense of identification with the disease, alleviate anxiety, depression and other negative emotions, stimulate patients' subjective enthusiasm and self-management ability, so as to form a more positive disease coping style [16].

4.4. Improve the Emotion Regulation Ability of Patients

The results of this study showed that after intervention, the score of NMR-S in the observation group was lower than that in the control group, indicating that theoretical nursing combined with adaptive cognitive emotion regulation strategy could improve the emotion regulation ability of liver cirrhosis patients with esophageal and gastric varices bleeding. The reason for the analysis can be that Snyder hopes to develop physical and feasible goals related to rehabilitation with patients in theoretical nursing, which helps to stimulate patients' positive expectations for the future [17]. By constantly giving positive psychological cues to patients and achieving small goals, we can reshape patients' confidence in disease treatment and improve the ability of emotional regulation.

5. Conclusions

In conclusion, Snyder hopes that theoretical nursing combined with adaptive cognitive emotion regulation strategies can improve the level of hope, psychological resilience and coping style of cirrhotic patients with esophageal and gastric variceal bleeding, as well as the ability of negative emotion regulation. However, the number of samples in this study is small and has a certain regional nature, so it is necessary to expand the samples for further research.

Abbreviations

EGVB	Esophagogastric Variceal Bleeding
C-HHI	Hope Level: Herth Hope Scale
CD-RISC	Conner-Davidson Resilience Scale
MCMQ	Medica Coping Modes Questionnaire
NMR-S	Negative Mood Regulation Scale

Author Contributions

Yinrong Ding is the sole author. The author read and approved the final manuscript.

Funding

Wenzhou basic scientific research project (Y2020670).

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] Li Xinyi, Li Jiaojiao, Sun Wei. Establishment and evaluation of line chart prediction model of dominant hepatic encephalopathy after transjugular intrahepatic portosystemic shunt in cirrhotic patients with esophageal and gastric fundus variceal bleeding [J]. *Journal of Clinical Hepatobiliary Diseases*, 2024, 40 (08): 1605-11.
- [2] Hepatology Branch of Chinese Medical Association, Gastroenterology Branch of Chinese Medical Association, Digestive Endoscopy Branch of Chinese Medical Association. Guidelines for prevention and treatment of esophagogastric variceal bleeding in patients with liver cirrhosis and portal hypertension [J]. *Chinese Journal of Internal Medicine*, 2023, 62 (1): 7-22.
<https://doi.org/10.3760/cma.j.cn501113-20220824-00436>
- [3] Fu Sirui, Deng Xiaoping Li, Li Yilu, et al. Effect of lung rehabilitation training based on hope theory on hope level and self-care ability of COPD patients [J]. *Journal of Nursing*, 2024, 39 (13): 111-5.
- [4] Peng Jing, Liu Yan, Zhu Shuting, et al. Research progress of cognitive emotion regulation strategies in patients with chronic diseases [J]. *Nursing Research*, 2024, 38 (08): 1423-7.
- [5] Garnefski N, Kraaij V, Spinhoven P. Negative life events, cognitive emotion regulation and emotional problems [J]. *Personality and Individual Differences*, 2001, 30 (8): 1311-27.
[https://doi.org/10.1016/s0191-8869\(00\)00113-6](https://doi.org/10.1016/s0191-8869(00)00113-6)
- [6] Hepatology Branch of Chinese Medical Association, Infectious Diseases Branch of Chinese Medical Association. Guidelines for the Prevention and treatment of chronic Hepatitis B (2022 Edition) [J]. *Journal of practical liver Diseases*, 2023, 26 (3): 1-22.
<https://doi.org/10.3969/j.issn.1672-5069.2023.03.040>
- [7] Splenic and Portal Hypertension surgery Group, Surgical Branch of Chinese Medical Association. Expert consensus on diagnosis and treatment of esophageal and gastric variceal bleeding in liver cirrhosis and portal hypertension (2019 version) [J]. *Chinese Journal of surgery*, 2019, 57 (12): 885,92.
<https://doi.org/10.3760/cma.j.issn.1673-9752.2019.12.001>
- [8] Hepatology Branch of Chinese Medical Association, Gastroenterology Branch of Chinese Medical Association, Digestive Endoscopy Branch of Chinese Medical Association. Guidelines for prevention and treatment of esophagogastric variceal bleeding in patients with liver cirrhosis and portal hypertension [J]. *Chinese Journal of liver Diseases*, 2022, 30 (10): 1029-43.
<https://doi.org/10.3760/cma.j.cn501113-20220824-00436-1>

- [9] Xu Huijing, Zhang Lu, Zheng Tingting, et al. Hope the effect of theoretical nursing combined with rational emotion regulation strategy on patients with secondary epilepsy after cerebral infarction [J]. *Nursing practice and Research*, 2024, 21 (04): 4828.
- [10] Duan Xiaojing, Zhang Ping, Wang Yanjing, et al. Effect of psychological intervention based on Snyder hope theory on psychological resilience of patients with ovarian cancer [J]. *Cancer progression*, 2022, 20 (22): 2349-52.
- [11] Dou Juan, Qiao Zhen, Liu Zhenguo. Effect of accurate nursing based on evidence-based theory combined with Snyder hope nursing on emotion regulation ability and coping style of patients with chronic heart failure [J]. *Clinical Medical Research and practice*, 2024, 9(07): 15861.
<https://doi.org/10.19347/j.cnki.2096-1413.202407039>
- [12] Yao Euryale, Liu Li, Luo Yanfang, et al. Analysis of potential categories of psychological elasticity in patients with primary brain tumors [J]. *Chinese Journal of Nursing*, 2022, 57 (19): 2363-70.
- [13] Li Xiaoyan, Liu Guangqin, Wang Ting. Snyder hopes the effect of theoretical intervention on the hope level of patients with liver cirrhosis [J]. *China Medical Journal*, 2024, 21 (14): 154, 6. <https://doi.org/10.20047/j.issn1673-7210.2024.14.42>
- [14] Chen Yanyan, Wu Xingmin. Effect of nursing intervention on self-management behavior and psychological elasticity of patients with hepatitis B cirrhosis [J]. *Clinical Research*, 2024, 32 (04): 191-315.
- [15] Qian Xianjie. Effect of Snyder hope theory on psychological resilience, hope level and coping style of patients with bone tumor [J]. *Chinese Journal of Modern Nursing*, 2020, 11): 1499.
<https://doi.org/10.3760/cma.j.cn115682-20190717-02554>
- [16] Tan Lingfang, Liu Huayan, Zeng Shan, et al. Study on the intervention effect of motivational interview based on timing theory on the parents of children with infantile spasm [J]. *Chinese Journal of practical Nursing*, 2021, 37 (03): 181, 9.
<https://doi.org/10.3760/cma.j.cn211501-20200222-00563>
- [17] Ni Jumin, Wang Huaping, Wen Xiayun. Effect of health education of IMB skill model on self-care ability and complication rate of patients with liver cirrhosis [J]. *Chinese Journal of Modern Nursing*, 2022, 28 (08): 1095-8.
<https://doi.org/10.3760/cma.j.cn115682-20210628-02819>