

Application status of IMB technique model in patients' self-management

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[Abstract]: WHO believes that self-management is a treatment process that requires everyone to participate in and requires cooperation between doctors and patients. Self-management is considered to be the key to effectively care for chronic diseases and to control the development of chronic diseases by performing daily health care functions. The researchers show that the intervention method can improve patients' self-management behavior more effectively under the guidance of corresponding theories. This paper aims to explore the application of IMB technique model in patient self-management.

[Key words]IMB skill model; Self-management; review

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I. The concept of self-management

WHO believes that self-management is a treatment process that requires everyone to participate in and requires cooperation between doctors and patients [1]. Self-management is considered to be the key to effectively care for chronic diseases and to control the development of chronic diseases by performing daily health-care-related functions [2]. Compared with other interventions, improving the self-management of patients with chronic diseases is the most beneficial for improving the health level of patients [3]. The concept of self-management was first proposed by professor Creer in the United States [4]. Patients undertake self-care tasks through guidance to prevent and treat diseases, and self-management is applied to treat childhood asthma. Self-management is an ability to cope with chronic diseases, which can effectively control symptoms, treatment, physical and psychological changes, and change lifestyle [5]. Clark [6] believes that self-management is a daily task that individuals must complete to control or reduce the impact of diseases on individual health. In other words, patients, with the assistance of medical staff, jointly develop problem-solving strategies and complete daily tasks of home management. Bandura [7] explained self-management in the aspect of social cognitive psychology, holding that human beings are active creatures that do not completely mechanically respond to external environmental stimuli, but achieve certain goals through their own observation, evaluation, reinforcement or punishment, and the relevant sense of self-efficacy is also formed. Self-management behavior refers to the positive behavior adopted to prevent the occurrence of complications in the course of disease or treatment and improve health level, namely, management of treatment and complication prevention, monitoring of symptoms and signs, role function and interpersonal relationship processing and coping with psychological problems caused by disease and treatment, etc. [8]. Self-management realizes the disease management mode from doctor-centered to patient-centered, which changes the relationship between patients and medical staff and enables patients to actively participate in their own health management. Social cognition theory, self-efficacy theory and self-determination theory constitute the theoretical basis of self-management. Social cognitive theory emphasizes that most people acquire knowledge, strategies, skills, beliefs and attitudes through learning in social environment and observing others. It holds that individual, environment and behavioral factors interact to determine individual behaviors. The theory of self-efficacy points out that self-efficacy mainly regulates and controls the individual's behavior, and then influences the individual's health outcome. Self-determination theory is a free choice of action based on a full understanding of individual needs and environmental information. The main contents of self-management are: how to manage diseases from the medical perspective, such as medication compliance, lifestyle changes, social role management, active return to society, maintaining positive social status and emotional management [9-10].

II. IMB skill model

IMB skill model was first proposed by Fisher [11] in 1992, which was used to analyze the process of individual health behavior change. This model points out that the change of individual health behaviors is a complex process, influenced by many factors, but emphasizes that the change of individual behaviors has three

core elements: information, motivation (including personal motivation and social motivation), and behavioral skills [12]. Information elements refer to the relevant theoretical knowledge that promotes individual behavior change. Motivation elements refer to individual motivation and social motivation, and specifically to individual attitude towards behavior change and relevant social norms. Attitudes include individual cognition and willingness to change behavior, while social norms include social support and social concepts [13]. Behavioral skill elements refer to the skills an individual should have to change behavior. The three core elements interact in the process of individual behavior change. Firstly, it provides accurate and scientific information for individuals; secondly, it promotes the change of individual concepts, strengthens the motivation of individuals to change behaviors; finally, it provides specific behavioral skills. When the three core elements reach a certain level, individual behavior changes [14].

III. Research status of IMB skill model in patient self-management

After Fisher put forward the IMB skill model, it has become a common behavioral change theory model used by researchers around the world. Among the foreign researches, IMB skill model was first applied in the related researches of AIDS prevention [15,16]. According to this model, the formulation of intervention measures and the intervention of target population can significantly improve the awareness rate of AIDS information of target population, guide them to have a positive attitude and form preventive behaviors. With the development of research, the intervention measures based on the IMB skill model are gradually applied in patients with diabetes, asthma and other diseases, and the research results show that the intervention measures based on this model can effectively improve the self-management of patients' medication [17,18].

In the study of patients' self-management, Osborn et al. [19] used the IMB skill model to explore the self-management behavior and self-monitoring glucose compliance level of diabetes patients, through 130 patients with type 2 sugar. The results of the survey of out-patient patients with urinary diseases showed that disease-related knowledge, patients' positive attitude and adequate social support were closely related to the self-management behavior of patients with diabetes, and patients could improve the compliance of self-testing blood glucose through effective self-management. Qi C [20] same IMB skills model was applied to diabetes research, explore the IMB skills model of symptoms in patients with diabetes management intervention effect, the results show that the model can actively mobilize diabetes self-management motive, promote the self management behavior, the researchers Meunier S [21], Mayberry [22] and the results are consistent. Chen, Y [23] use IMB techniques such as model the caregivers of patients with heart failure in intervention research, discusses the model of heart failure patients with caregivers in promoting the role of symptoms in patients with management, results show that the model based on IMB skills in patients with heart failure caregivers targeted intervention measures can effectively improve the caregivers of patients with heart failure in patients with heart failure disease management, and improve the patient's quality of life. Chang, T Y et al. [24] discussed the intervention effect of IMB skill model on self-management of pd patients, and the results showed that the IMB skill model could explain 56.5% of self-management behaviors and showed significant positive significance in preventing pd peritonitis.

In domestic studies, the IMB skill model has been applied to the self-management of patients with coronary heart disease, heart failure, bronchial asthma and other diseases. Zhang Lefang [25] model as the theoretical framework for IMB skills to develop health education plan, discuss the disease knowledge and self-management in patients with coronary heart disease health education effect, the results show that the IMB skills under the model of health education can significantly improve patients with coronary heart disease (CHD) disease knowledge awareness and self management level, the research results and ZhuLei [26] consistent results. Yang mei full [27] choose 100 cases of patients with heart failure as the research object, explore the IMB skills model the influence of self-management in patients with heart failure, the results show that after the intervention of the intervention group and control group self-management level were significantly improved, and the intervention group compared with control group, intervention group self-management levels more apparent, IMB skills model can effectively improve heart failure patients self management level, make the patients quality of life improved. The research results are consistent with those of li chunmei [28]. Xiong Yi [29] to IMB skills model as the theoretical basis for health education models, explore the application of the model in cesarean section maternal effect, the results show that guided by the IMB skills model building of maternal health education mode can improve the cesarean delivery of self-efficacy, promoting the forming good self management, and promote the cesarean delivery of maternal postpartum recovery. LuJie [30] to select patients with esophageal cancer as the research object, according to the patients in the hospital the document order of the object of study is divided into observation group and control group, model based on IMB skills of nursing intervention on postoperative esophageal cancer patients self management efficiency and the influence of the quality of life, the results show that the two groups after intervention in patients with self management efficiency and quality of life were improved, and the observation group is better than that of control group, nursing intervention based on IMB skills model can shorten the recovery time postoperatively in patients with esophageal cancer, improve postoperative self management efficiency and quality of life in patients with esophageal cancer.

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