



Standardized Self-management Education of Psoriasis Patients during the COVID-19 Pandemic

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Abstract: Since the occurrence of novel coronavirus pneumonia (COVID-19 pneumonia) in December 2019, many patients' original diagnosis and treatment plans have not been carried out normally, and patients at home have been greatly affected. Psoriasis is a common chronic recurrent skin disease, which seriously affects the physical and mental health of patients. When the skin barrier function of psoriasis patients is damaged, inappropriate protection will increase the sensitivity to the virus and induce or aggravate the disease. During the COVID-19 epidemic, some psoriatic patients isolated at home fell ill due to lack of disease awareness, poor self-management and lack of treatment. Patients who go out for medical treatment will increase the risk of COVID-19 infection. Relevant studies have pointed out that providing self-management education for patients can effectively improve the treatment effect and quality of life, and also play a significant positive role in health outcomes. The lack of standardized self-management of psoriasis patients is one of the important reasons for their disease recurrence. Standardized self-management is an important guarantee for improving patients' health and quality of life. Based on clinical practice and existing literature reports, this paper summarizes the current situation and experience of standardized self-management education programs and self-management, and provides a reference for medical workers on how to implement standardized self-management education for psoriasis patients during the outbreak of novel coronavirus pneumonia.

Keywords: Novel coronavirus pneumonia, Psoriasis patients, Standardized self-management education,

Introduction

COVID-19 pneumonia (hereinafter referred to as "covid-19 pneumonia") refers to the pneumonia caused by novel coronavirus infection [1]. On March 11, 2020, WHO announced that COVID-19 had entered the state of "global pandemic" [2]. Because of its strong infectivity and pathogenicity, the epidemic has gradually spread to many provinces and cities in China as an acute respiratory infectious disease with high transmission risk, COVID-19 has been included in the legal class B infectious diseases in China and strictly controlled according to the class A infectious diseases.

Psoriasis, commonly known as psoriasis, has the characteristics of long course, high recurrence rate and difficult cure, which seriously affects the quality of life of patients [3]. At present, clinical treatment can not cure psoriasis, but can only control the development of psoriasis. Psoriasis patients often face problems such as lack of health care and prevention knowledge and insufficient understanding of disease [4]. People with novel coronavirus are generally susceptible. When the skin barrier function of psoriasis patients is damaged, improper protection will increase the susceptibility to the virus, induce or aggravate the disease, and it is one of the high-risk groups of novel coronavirus infection. During the COVID-19 epidemic, some psoriasis patients who were isolated at home suffered from illness due to lack of disease awareness, poor self-management and lack. Patients who go out for medical treatment will increase the risk of COVID-19 infection. The lack of standardized self-management of psoriasis patients is one of the important reasons for the recurrence of their diseases. This paper describes the standardized self-management scheme, status quo and content of psoriasis patients as follows.

1. The role of standardized self-management education in hospitals

Some studies have found that psoriasis patients hope to receive long-term health education to improve their self-management ability [5]. Formulate a standardized self-management education plan to evaluate the self-management status of each subject,



and formulate an individualized self-management education plan according to its specific situation. The contents of self-management education include social psychological management, medication management methods, diet management, lifestyle management, skin management and emotional regulation. As one of the common chronic diseases, psoriasis has the characteristics of repeated attacks and aggravation, often combined with other diseases, and seriously affecting physical and mental health. Patients have a higher demand for medical care.

1.1 Carry out standardized self-management education program during hospitalization

When the patient arrives at the ward to complete the hospitalization procedures, the responsible nurse will place the patient in the bed, that is, introduce the environment of the ward, the rules and regulations of the responsible doctors, nurses, the hospital and departments, and various inspection items. To make the patients familiar with the ward environment and adapt to the life in hospital, and provide basic materials for health education during hospitalization. Health education during hospitalization is the main way for patients to obtain disease-related knowledge, and it can significantly improve the self-management ability of patients after discharge. The establishment of outpatient clinics and health education publicity columns provides a good service platform for patients [6]. Carry out health education on disease knowledge in the hospital every two months. In Zhu Beibei's [7] research, disease knowledge education was carried out for patients with psoriasis. The intervention contents included three aspects: ① communicate with patients and family members, understand the patient's health knowledge in detail, and summarize the patient's inadequacy and health knowledge needs. ② Conduct in-depth face-to-face communication with patients, use easy to understand language, explain precautions to patients and guide patients to self-management, work with patients to develop personalized health plans, and strengthen their understanding and memory of health education. ③ Listen to the patient's feedback, understand the situation, and on this basis, explain the precautions to the patient and his family again, and focus on the importance of following the doctor's advice, and guide the patient to develop good healthy living habits. Through the three aspects of intervention, the patients' disease health knowledge level and health behavior score were improved, indicating that knowledge health education can increase the patients' grasp of disease knowledge, enable them to correctly face the disease, promote the treatment effect of the disease, and reduce their clinical symptoms. Zhu Beibei pointed out in her research [7] that the health education of patients affected the treatment effect and prognosis to a certain extent.

1.2 Carry out Internet remote diagnosis and treatment consultation

Internet remote diagnosis and treatment in today's information technology is so developed, "Internet + medical" will become a new medical mode that not only facilitates patients' medical treatment, but also relieves the pressure of conventional medical treatment. The hospital has opened Internet diagnosis and treatment services to facilitate patients' online consultation.

Standardized home self-management scheme

Every week, nurses are arranged to organize patients to fill in the disease observation record card through Wechat Yinyou group. According to the patient's disease status and individual characteristics, they can answer the patient's questions and timely understand the changes of the patient's condition, mainly including the symptoms related to the outbreak of novel coronavirus pneumonia, epidemiological history and the health status of patients with psoriasis. ① Monitoring of novel coronavirus pneumonia epidemic situation related symptoms and epidemiological history: through self-management disease observation record card, those who have a history of going out of the epidemic area or a history of contact with high-risk groups are screened, and they and their family contacts are guided to observe and isolate at home. Their body temperature is monitored in the morning and evening every day. In case of suspected symptoms such as fever, cough and dyspnea, they are immediately reported to their communities or streets, and the patients are instructed to strengthen their awareness of protection and wear masks correctly, Do a good job of disinfection and protection, and choose to walk or private car for medical treatment. ② Self observation data of patients are collected through Wechat, including mental state, appetite, defecation, skin and scleral color, etc., to guide regular measurement and recording every day. Wechat video plays respiratory function exercise exercises, and any abnormality shall be solved in time.

2. Concept of self-management

Barlow defines self-management as the ability to manage symptoms, treatment, physiological and psychosocial changes and make lifestyle changes developed in the process of coping with chronic diseases [8]. Self management refers to maintaining and improving their own health monitoring through the management behavior of patients to reduce the impact of diseases on their social functions, emotions and interpersonal relationships [7] And a healthy behavior of persistently treating one's own diseases [9]. Self-management is a kind of disease management mode that individuals use behavior support therapy to maintain their own health from the aspects of physiology, psychology and society. Good self-management is conducive to

promoting patients to achieve the best physical and mental health [10]. Self management was first proposed by Professor Iorig of Stanford University Education Center in the United States and widely used in self-management of chronic diseases [11]

3. Research status of self-management of psoriasis patients

The guidelines for psoriasis in various countries have repeatedly emphasized the importance of disease self-management. However, the current situation of disease management is grim, mainly manifested in low drug compliance and poor management of non drug factors. ① Topical drug therapy is the preferred treatment for psoriasis [12]. The American Dermatology Association pointed out that 80% of patients with psoriasis are mild to moderate, and only external treatment can achieve satisfactory results [13]. However, a systematic review on the local medication compliance of patients with psoriasis pointed out that the use rate of patients' external medication ranged from 55% to 100%, while those who used drugs in full dose only accounted for 35% to 72% [14], and the compliance decreased with the extension of treatment time [15]. Poor compliance will lead to relapse and aggravation of illness, increase of comorbidities, and corresponding increase of hospitalization risk [16]. ② In addition to low medication compliance, various non drug factors such as bad living habits (smoking, drinking, lack of exercise) and high psychological pressure can also aggravate the disease [17]. At present, the research of psoriasis self-management abroad is relatively mature, and the application of psoriasis self-management based on smart phone has been developed. The development of self-management of psoriasis patients in China faces great challenges [19], which may be related to the generally high age of psoriasis patients in China, the low education level, and the lack of understanding of their own physical conditions and disease treatment.

4. The necessity of self-management in psoriasis

With the normalization of the COVID-19 epidemic, self-management has become the main choice for most psoriasis patients. For patients with psoriasis who are in a stable state of illness and are about to go home to recuperate, due to the impact of the epidemic situation, patients with psoriasis face a great risk of infection and lack of corresponding protection knowledge on the way out of Hospital; For follow-up and reexamination, traffic control is implemented in the area where some patients are located, which leads to failure to follow-up and prescribe drugs on time, or failure to solve discomfort symptoms in a timely manner. Because psoriasis has the characteristics of long course and repeated delay, it is difficult to treat clinically, and patients are prone to anxiety and depression. At the same time, the clinical characteristics of the disease obviously affect the external image of the patients, making them feel inferior and unwilling to go out to public places, seriously affecting the quality of life of the patients. It is also worried that the epidemic is more likely to cause infection, extreme fear and anxiety, and psychological pressure. Therefore, the application of remote Wechat groups and small programs to self-management intervention can guide psoriasis patients to establish an objective understanding of the epidemic and a strict concept of protection, establish good living habits, avoid infection, and alleviate anxiety and fear.

5. Self management education content

5.1 Psychosocial management

Unable to go out during the epidemic period, the patient's family and social support system were established. Psoriasis patients, especially during the epidemic period, will encounter a variety of problems and thus bear enormous psychological pressure. At this time, the maintenance of patients' health is not only the responsibility of medical personnel, but also the role of all aspects of society and family members, that is, the family support system. By popularizing the management knowledge of skin diseases and other chronic diseases to the family members of patients, the family members can help the patients to do a good job in disease and psychological health management while doing a good job in epidemic prevention and control [20].

Many patients believe that their bodies are unable to cope with daily social activities and fear rejection. The study [21] pointed out that the disease affected the family of the patients at the same time, and some patients thought that they brought serious burden to the whole family during the disease activity. Inform the family members that psoriasis is not an infectious disease. At the same time, the patients were informed that low self-esteem and depression would affect the treatment, and the family members were encouraged to play the role of family support, and care and understand the patients from various aspects. Instruct the family members to divert the patient's attention, such as listening to music and proper exercise, so as to relieve the psychological pressure, keep them relaxed physically and mentally, and maintain a positive and optimistic treatment attitude, so as to provide favorable conditions for the treatment of the disease. In addition, psoriasis brochures were distributed at designated places such as communities and hospitals to popularize psoriasis health knowledge and increase social support.

5.2 Medication management method

The main treatment methods of psoriasis include external medicine, oral medicine, intravenous medicine and physical therapy (ultraviolet, excimer laser Etc.). External medicine is one of the basic methods to treat psoriasis, which has the advantages of

directly acting on skin lesions, reducing inflammation and excessive cell proliferation. Proper application and use of external drugs play a key role in disease treatment and prevention of recurrence [22]. The patient needs long-term medication after discharge, and because there are many kinds of drugs involved in the combination medication, the drug dosage should be adjusted according to the patient's condition under the guidance of professionals, and cannot be reduced, increased or stopped by itself. Liu Yan et al [23] applied the cicare communication mode (a process oriented communication mode, which is divided into six steps in turn: contact, introduction, communication, inquiry, answer and leave) to the health education of psoriasis patients. By strengthening the two-way communication between nurses and patients, the treatment compliance of patients was improved. In addition, it should be noted that many drugs can induce the recurrence of psoriasis, such as amoxicillin, ampicillin, cimetidine, cyclosporine, etc. [24]. Nonstandard glucocorticoid treatment can also cause the exacerbation and recurrence of psoriasis. Therefore, patients with psoriasis should strictly follow the doctor's instructions and do not use drugs arbitrarily.

5.3 Diet control method

Diet control is the most basic and important measure for subjects' self-management; Zuccotti et al. [25] pointed out that nutritional support treatment plays a key role in the prevention and treatment of psoriasis. However, there is still a lack of expert consensus on nutritional support therapy for psoriasis patients. Some scholars pointed out that adhering to the Mediterranean diet can effectively reduce the severity of psoriasis [26]. Mediterranean diet is characterized by: more fruits and vegetables, beans, cereals and fish; Use vegetable oil when cooking, especially olive oil; Avoid eating spicy and irritating food; Reduce the intake of dairy products and meat, especially red meat, such as beef and mutton. Patients with psoriasis can learn from the Mediterranean diet model to prevent and assist disease treatment. The Mediterranean diet mode is suitable for psoriasis patients and plays a role in prevention and auxiliary treatment.

5.4 Lifestyle Management

Healthy lifestyle is an important part of psoriasis self - management It is not suitable for strenuous exercise. It is better to walk, stand or do light physical activities in a fixed place. When getting up and going to the toilet, move slowly and carefully to prevent adverse events such as hypotension and falls. Good lifestyle mainly includes: ① quit smoking and drink. ② Develop good sleep habits to ensure adequate sleep. Psoriasis patients should develop good sleep habits through reading books, reading newspapers, self relaxation training and so on. Improve sleep quality and reduce disease recurrence rate [28]. Because of the disease characteristics of psoriasis patients, exercise should follow the principle of gradual and orderly, not too tired. The exercise mode is mainly aerobic exercise, such as walking, jogging, Taijiquan, gymnastics, etc. you can choose some simple and easy exercises that are not limited by the site and personnel according to your own situation, so as to facilitate the development and long-term adherence [29]. At the same time, according to their own interests and hobbies, psoriasis patients can turn exercise into entertainment, passive into active, and then develop good exercise habits and adhere to them for a long time. Li Yufen et al. [30] pointed out that patients with psoriasis can effectively prevent disease recurrence by walking for 1 to 2 hours every day.

5.5 Skin management

The change of skin barrier function is related to many skin diseases, including xerosis, atopic dermatitis and psoriasis. Among them, psoriasis is one of the most serious diseases causing skin damage [31]. Methods of skin management mainly include: ① keep skin clean. ② Use skin protectants. ③ Strengthen skin protection in winter and spring. ④ Using solar therapy some studies believe that solar therapy is a natural and effective way to treat psoriasis [32]. Ultraviolet rays in sunlight can reduce cell infiltration by triggering cell apoptosis or immunosuppressive pathway, which is conducive to removing damaged skin tissue, improving psoriasis skin lesions, and reducing the incidence of vitamin D deficiency in psoriasis patients by inducing vitamin D synthesis [33]. Therefore, the patients with psoriasis can be appropriately treated with sunlight therapy to stimulate the anti-inflammatory response of the skin, regulate the immunosuppressive pathway, and then reduce the recurrence of psoriasis.

5.6 Emotion regulation

In the face of the sudden COVID-19 epidemic, the patient's body is in a state of stress, and external social factors further aggravate anxiety and depression. (1) Patients with mild anxiety and depression can adjust themselves. CBT can correct patients' irrational cognition, improve patients' bad mood and arouse patients' positive emotions, so as to give play to their self initiative and correct inappropriate behaviors. It is recommended that patients learn the popular science books related to COVID-19 and the relevant documents issued by the National Health Commission, so as to strengthen their understanding of their own diseases and COVID-19. At the same time, family support should be strengthened. Family members should communicate with patients, encourage and care for patients, understand the causes of negative emotions of patients, and give guidance. (2) On the basis of self psychological adjustment, patients with moderate anxiety and depression need to take anti

anxiety, anti depression and hypnotic drugs for symptomatic treatment, and should not deliberately avoid drug intervention. During drug selection, focus on adverse drug reactions. For example, benzodiazepines can inhibit breathing and increase the risk of falls. Elderly patients need to use them with caution. At the same time, pay attention to the treatment and medication of comorbidities to avoid drug interaction to increase adverse reactions or reduce the efficacy. Patients can seek psychological assistance on Wechat official account or psychological service platform of the hospital. For the patients with severe anxiety and depression, in addition to the above measures, psychological crisis intervention treatment shall be given. The psychological doctor shall give individualized psychological crisis intervention and give specialized treatment at the same time. Family members should accompany the patient all day to prevent the risk of self injury and suicide. In case of serious cases, they should be hospitalized.

Conclusion

To sum up, in the current epidemic prevention and control stage, it is very important to improve the public's awareness and ability of self-health management. The implementation of standardized self-management education for psoriasis patients can enable patients to actively participate in the treatment, monitoring and management of their own conditions, which is conducive to improving the treatment compliance and self-management ability of psoriasis patients. Medical personnel should master the knowledge and methods of disease self-management of patients with psoriasis, improve their self-management ability in medication methods, diet management, skin management, lifestyle, emotional regulation, etc., ensure the continuity and integrity of treatment, and then promote the improvement of their quality of life. At the same time, according to the patient's age, occupation, family environment, social role, social support and education level, the education form should be more diversified and feasible, so that the patient and his family are willing to accept and put into practice. Extend the existing self-management education service from the hospital to the home, so that patients can get more medical support outside the hospital, and gradually implement self-management education in every chronic disease management project to play a greater role.

Author Contributions: "The author of this article mainly reviews and consults the clinical literature, and summarizes the current situation and contents of standardized self-management of psoriasis patients. " I have read and agreed to the published version of the manuscript..

Conflicts of Interest: The author declares that there is no conflict of interest.

Acknowledgments: I would like to thank my colleagues in The Department of Dermatology of Beijing Jingcheng Skin Hospital for their support and valuable opinions on this paper, as well as their opinions on the improvement of this paper. I also thank the doctoral students in clinical psychology of the International College of the Christian University of the Philippines for their support.

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