

Effect of Psychological Nursing Combined with Rehabilitation Training on ADL in Patients with Craniocerebral Injury

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Abstract

Objectives: The objective of this study is to explore the effect of rehabilitation training combined with psychological nursing on the daily life ability of patients with craniocerebral injury. **Methods:** Forty-eight patients with craniocerebral injury from August 2015 to April 2017 were selected as the study participants, and they were randomly divided into control group and observation group. Twenty-four cases in the control group were treated with routine care, and 24 cases in the observation group were treated with psychological nursing and rehabilitation training. The exercise function, daily activity ability, and satisfaction degree of the two groups were analyzed. **Results:** Compared with the observation group, the recovery of exercise ability was lower in the control group than that in the observation group, and there was a statistically significant difference between the two groups ($P < 0.05$). Compared with the control group, the recovery of daily living activity of patients in the observation group was more remarkable, and there was a statistically significant difference between the two groups ($P < 0.05$). The patients' satisfaction in the control group was significantly lower than that in the observation group, and the difference between the two groups was statistically significant ($P < 0.05$). **Conclusions:** The application of rehabilitation training and psychological nursing in clinical nursing of patients with craniocerebral injury can speed up the recovery function of patients.

Keywords: Control group, craniocerebral, psychological, rehabilitation training

INTRODUCTION

Traumatic brain injury is one of the main causes of death and disability in developed countries. Available data show that about 10,000–10,000 people die of brain injury and about 10,000–10,000 people are disabled by brain damage in countries such as the United States and Britain each year. As far as the situation in China is concerned, with the progress and development of the society and the increase of injury factors such as traffic and construction accidents, injury has become a common disease in trauma in our country.^[1] According to the standard of epidemiology, the incidence rate of injury was 10,000 in every province and city, and the adjustment rate was 10,000 in China. Other studies have shown that the injury caused by traffic accident is brain injury, the death rate of which is as high as one in the urban area of our country, among which the rate of disability caused by severe injury is as high as one. The mortality rate, disability rate, and plant survival rate are high, which often lead to patients' feeling, movement,

language, cognition, and other functional disorders, resulting in lifelong disability of patients and bring heavy mental and economic burden to the family and society of patients. Injury is mostly a sudden event, which not only brings different degrees of somatic, cognitive, and social dysfunction to patients but also is a serious stress factor for its caregivers Liu. System theory holds that human is an open system, which exchanges material energy and information with its surroundings all the time.^[2] People in care include individual, family, community, and social levels. On the basis of the framework of the system, it is considered that the family is an open system which strives to achieve a healthy state. If the career has the accumulated

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belief in life, he/she can take care of the patient in a better state of health and thus maintain the healthy state of the family. The family pressure theory holds that whenever a person is in the mileage of family development, the change of family style or the change of family members' role is a kind of influence on the health of the party concerned or the family as a whole. Whether it is the patient himself/herself or the other members of the family, the relationships or ways of getting along with each other, the whole family system, and its functions are directly or indirectly affected. Conventionally, however, most health-care workers have focused on rescuing patients' lives and monitoring their condition, neglecting to provide support.^[3]

Overview

Family members are the largest social support force for patients and also the emotions of the family members who are the main providers of home care and hospital care. In particular, the emotions of the patients' main caregivers appear different psychological reactions with the different stages of disease development. If we cannot cope with psychological pressure well, we cannot take care of the patients and take part in the nursing activities of the patients, which will affect the rehabilitation of the patients. In the past, nursing only focused on the patients and neglected the mental health of the family members. Studies have shown that family members can help reduce stress and improve prognosis. Some studies believe that families have certain influence and motivation to their family members, and the support of family members can help them to deal with and ease their distress and frustration, so that they can obtain spiritual comfort and sustenance. Social support refers to the subjective and objective influence of various social relationships based on social networks. There is a positive relationship between social support and human health. Most scholars believe that good social support is beneficial to health, and the existence of bad social relations is harmful to physical health (strong social support systems). It can help individuals reduce stress to a minimum, whereas those who lack social support system are vulnerable to stress. The buffering model holds that social support plays a role in the physical and mental health of the individual through pressure elimination. It can buffer the negative effects of stress events on the individual's physical and mental conditions and maintain and improve the individual. The buffer effect of social support may be both general and specific. General social support means that any social support can buffer specific social support for any kind of stress event, which means that particular social support is only buffered for a particular stressful event. Studies have shown that the buffering effect of social support often acts through the internal cognitive system of human beings. Social support can play a role in two aspects.

METHODS

Traumatic injury (TBI) is an important cause of disability and death, and the family members of the patient have different degrees of psychological pressure in the course of care.^[4] The results of this study showed that the scores of family members

in the surgical treatment of traumatic injury were significantly higher than those in the nonoperative group. This indicates that the mental health status of the patients with traumatic injury treated by surgery is more serious.^[5] This is consistent with their findings. This may be because patients undergoing surgical treatment are more severe and develop more rapidly. Although there was no significant increase in the severity of the disease in the hand-operated group compared with the nonoperative treatment group, the use of surgical treatment may lead to the cognitive conclusion that the patient's condition is serious [as Figure 1].

As a result, the subjective understanding of the patient's condition is more serious than that of the patient's actual condition because the site of the operation is the head, and the skull is the most critical part of human beings.^[6] Coupled with the family's lack of basic understanding of the operation, it is easy to think that the patient's condition is very serious thus increasing their psychological burden. The severity of the patient's condition has an important effect on the mental and physical health of the family members, and the family thinks that the more serious the patient's condition, the lower the family's physical and mental health. Some scholars have divided the psychological state of the family members into three stages. It is believed that the stability of the medical condition and the minimization of the degree of injury play a decisive role in the mental state of the family members. All members of the family will unite and do their best to help the sick. The three stages include emotional comfort, denial of progression, and unrealistic expectations. The patient is expected to survive as much as possible and to recover fully thereafter. This leads to three stages of doubt, anxiety, sadness, depression, guilt, despair, and a sense of age. Some families finally enter the stage of sadness, role recognition, and role division, with the aim of maintaining the patient's recovery and physical integrity as much as possible. This shows that traumatic brain injury events result in a series of physical, cognitive, and psychosocial negative effects on the family members, individuals, and the family as a whole because of the injury of the patient, the increased stress of the family, the difficulty of concentration, and the difficulty of making decisions [as Figure 2].

RESULTS

Most scholars believe that good social support is good for health. It is generally believed that objective support refers to the direct aid and social network in material quality and the existence and participation of solidarity relationship. This kind of support is independent of the feeling of individual and is the reality of objective existence. The degree of utilization of support refers to the use of social support by individuals. Therefore, objective support is the material basis of the whole social support network, and the degree of utilization of the support reflects the subjective initiative of the individual. Subjective support is subjective experience or emotional support. It is the respect, support, and understanding of the

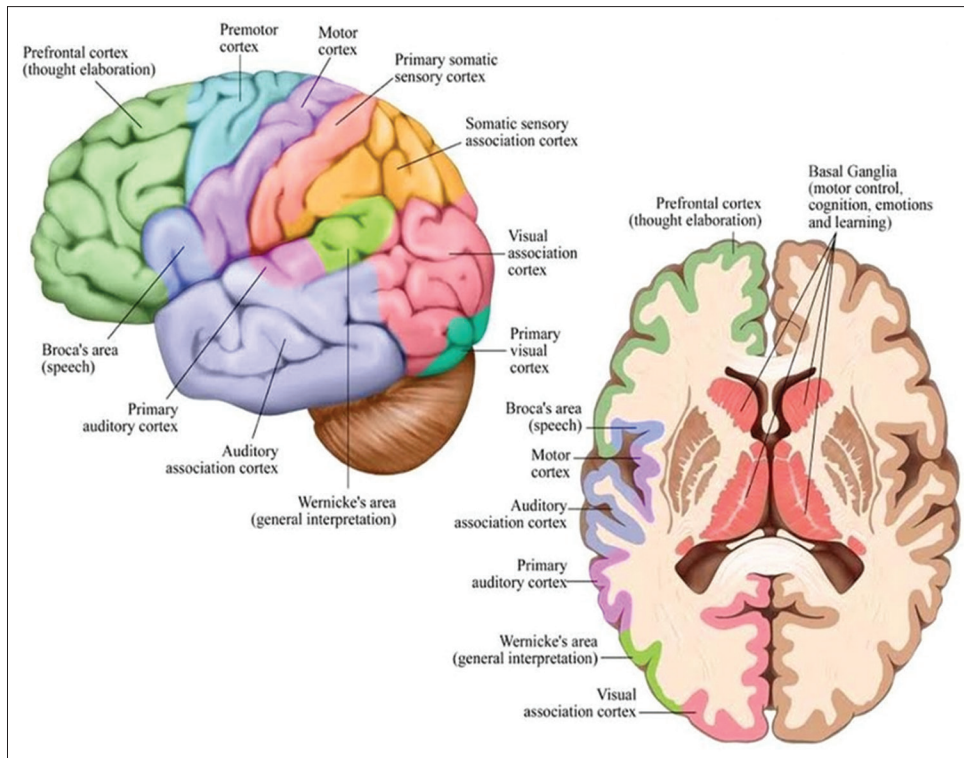


Figure 1: Functional differentiation of various parts of the brain

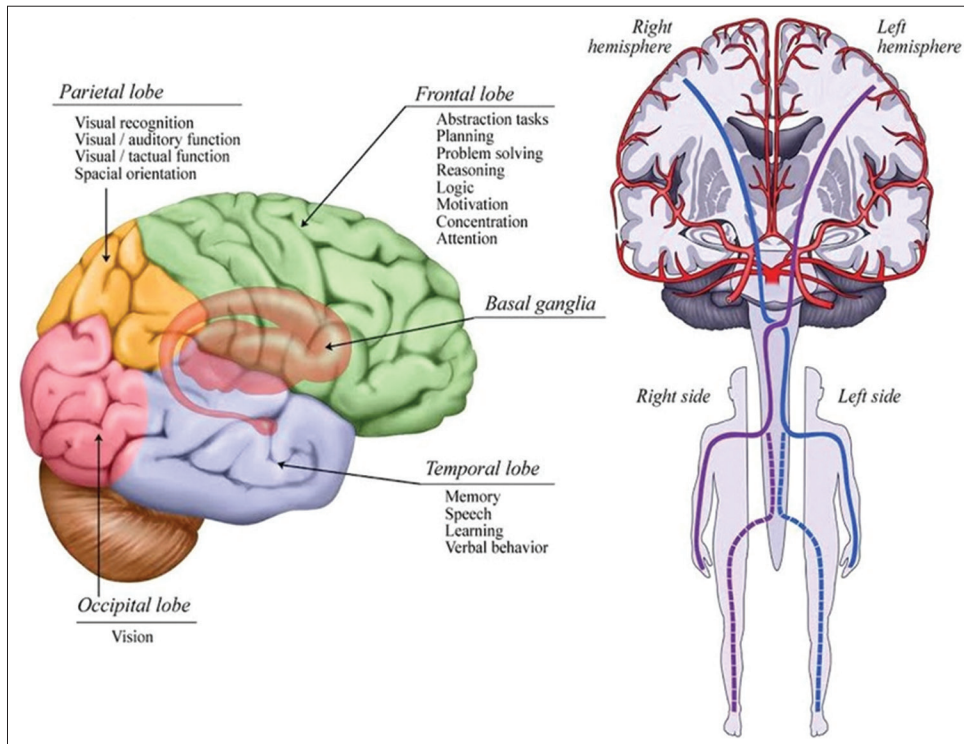


Figure 2: Distribution of cerebral and cardiovascular connections

individual in the society. It is closely related to the subjective feeling of the individual. This study found that the total score of social support and subjective support of the families of patients with traumatic injury was significantly lower than that of the

nonoperative treatment group, but there was no significant difference in the objective support dimension between the two groups. This shows that there is no difference between the actual and visible support, such as material assistance, the

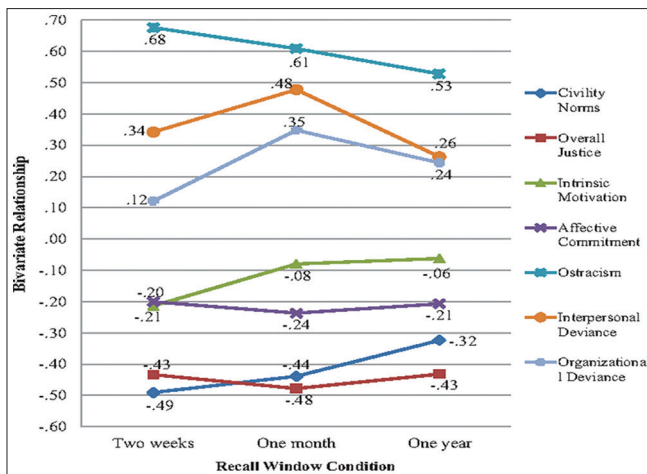


Figure 3: Comparison of cardiovascular functions

number of social connections, and the degree of access of the patients with traumatic injury, as compared with the control group. However, their subjective experience of social support and their ability to use social support were worse than those of the control group. This may be related to the family members' desire for more social support in the patients with traumatic injury or to the decrease of their subjective experience ability affected by such great stress events. A good coping style helps to relieve mental stress, help individuals to solve problems successfully, and play a role in balancing psychology and protecting mental health. This study showed that although there was no significant difference between the family members of the patients with traumatic injury and that of the nonoperative treatment group in solving the problem dimension, both groups used positive problem-solving coping styles. However, there was a significant difference between the two groups in the dimension of seeking help in another positive coping style, and the operative group was lower than the nonoperative group, which indicated that the mature coping style was worse in the surgical treatment group than in the nonoperative treatment group. In addition, the immature coping styles of surgical treatment group were significantly higher than that of the nonoperative group. This indicates that the family members of traumatic injury often adopt negative coping style in stress events [as Figure 3].

CONCLUSIONS

The results of correlation analysis showed that the social support of patients' family members and coping styles were

all dimensions of solving problems. There was a significant negative correlation between the two dimensions and the total score and different dimensions. The more social support and the positive and mature coping style, the better the mental health status. There was a significant positive correlation between coping style self-reproach, avoidance, fantasy, rationalization, and a total score and different dimensions, which indicated that the more negative and immature coping style was, the worse the mental health status was. The results of multiple linear regression analysis showed that patients' condition, subjective support, support utilization, self-reproach, avoidance, rationalization, help-seeking, and fantasy had a significant return effect on the family members of patients with brain trauma. Subjective support and the degree of utilization of support entered the regression equation, which indicated that social support was indeed beneficial to mental health, and the subjective support felt to be more meaningful to mental health than the actual objective support. Although the perceived support is not an objective reality, the perceived reality is a psychological reality, and it is the psychological reality as a practical variable that affects human behavior and development. Remorse, avoidance, fantasy, physic chemistry, and seeking help entered the regression equation, which indicated that the coping style of patients' family members had an important impact on mental health.

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Conflicts of interest

There are no conflicts of interest.

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