

Research Progress of Nutritional Diet for the Elderly

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Abstract: With the rapid development of society, an aging society has already quietly arrived, and the accompanying elderly care service industry is also booming. Chinese medicated diets play a great role in the rehabilitation and health of the elderly. Therefore, the elderly are more sensitive to Chinese medicated diets. There is also an increasing demand for the elderly, especially the disabled elderly, whose physical functions are reduced, they are inconvenient to move, and have difficulty in taking food on their own. Therefore, they are prone to malnutrition, which leads to a series of complications. This article mainly uses qualitative research methods to study the current status of nutritional diets for disabled elderly people at home and abroad, especially bedridden elderly and nasal feeding elderly, and the nutritional value of traditional Chinese medicinal diets, in order to explore the important role of traditional Chinese medicinal diets in the nutritional diet of disabled elderly.

Keywords: disabled elderly, nutritious diet, traditional Chinese medicine diet

1. Introduction

The disabled elderly refer to the elderly who can't take care of themselves completely or partly and must rely on others to take care of them [1]. According to statistics from the National Health and Family Planning Commission, by 2020, the number of elderly people aged 60 and over in my country will reach about 255 million, and the disabled elderly will exceed 10 million. Among them, the elderly who are bedridden for a long time and those who feed by nose will account for the disabled elderly. The proportion of is very large. The prominent problem in the diet of the disabled elderly is the unbalanced diet, especially the bedridden elderly and the elderly who feed by the nose. They cannot take care of themselves and have inconvenient activities. At the same time, the body is aging and the body's metabolic capacity is reduced, which affects digestion and absorption, which is easy to cause malnutrition. This paper studies the nutritional status of bedridden elderly and nasal feeding elderly among the disabled elderly at home and abroad, in order to provide suggestions and guidance for improving the nutritional diet of disabled elderly.

2. A review of research on nutritional diet for the Chinese bedridden elderly

Tang et al. investigated and analyzed the nutritional and health status of the population in two elderly care institutions in Chongqing urban area and found that the fat content of the disabled elderly group was significantly higher than that of the non-disabled elderly ($P < 0.05$), but their calf circumference, TSF, Indexes such as BMI are significantly lower than those of the non-disabled elderly ($P < 0.05$), which indicates that the overall nutritional status of the disabled elderly is not optimistic, and is significantly worse than that of the non-disabled elderly. The possible cause is malnutrition caused by a single diet, and the weakened digestion and absorption function of the gastrointestinal tract of the disabled elderly are related to [1]. When studying the grip strength and nutritional status of elderly patients who have been bedridden for a long time, Wang and others found that the grip strength gradually decreases with age after the age of 40. This indicates that serum albumin, a nutritional index related to grip strength in the body for long-term bedridden elderly people, increases with age. (ABL) and hemoglobin (HGB) etc. showed a downward trend, showing signs of malnutrition [2]. Jiang et al. studied the blood iron, zinc, calcium, copper, element and nutritional status of the long-term bedridden and ambulatory elderly in a comparative analysis and found that the long-term bedridden elderly have lower iron and zinc content, and the ambulatory elderly have lower calcium content. The total protein, albumin and hemoglobin of the long-term bedridden elderly are lower than those of the ambulatory

elderly [3]. Based on the above literature research, the nutritional and dietary status of the disabled elderly is poor, especially the bedridden elderly. In addition to the aging of the body, they are inconvenient to move independently and are more likely to ignore the balanced combination of food and nutrition. At the same time, they cannot take a walk due to long-term bed rest. The basic exercise method promotes digestion and absorption, and the circle of life is relatively small, and the body and mind are affected to a certain extent. Therefore, improving the spleen and stomach absorption function of the bedridden elderly and paying attention to a comprehensive and balanced diet are important ways to improve the malnutrition of the bedridden elderly.

3. A review of research on nutritional diet for the elderly in China

The nose feeding method is a technique that inserts a catheter into the gastrointestinal tract through the nose, and infuses liquid food, water and drugs from the tube to maintain the patient's nutrition and treatment needs. Due to the limitations of nasal feeding relative to oral feeding, patients undergoing nasal feeding are prone to gastroesophageal reflux, which is even worse for the elderly who are weak and have poor gastrointestinal absorption. Not only do they fail to taste the food, but they may also cause malnutrition. When researching different enteral nutrition methods, Liu and others found that due to the increase in gastric residual volume, elderly patients will have aspiration, and some patients with nasal feeding are prone to vomiting, reflux and constipation, which affect absorption and cause malnutrition [4]. Xiao et al. found in the investigation and evaluation of the dietary nutritional status of the elderly with nasal feeding that the elderly are often accompanied by some basic diseases, which lead to an increase in the calorie and protein requirements in the disease state, and the energy intake of the elderly rarely reaches the basic energy expenditure. Insufficient total protein intake will also be released as energy and cannot be used to synthesize its own protein. The above reasons will cause low levels of ALB (albumin) and Hb (hemoglobin) [5]. Based on the investigation and research of the above literature, the elderly who have long-term nasal feeding also suffer from malnutrition. Not only did they not taste the delicious food, but they also had poor digestion and absorption. Therefore, we should provide better nutrition support to improve the quality of life of the elderly with nasal feeding.

4. A review of foreign research on nutritional diet for the disabled elderly

The aging of the population is a common challenge facing the world. The number of disabled elderly people in the world is increasing, which has gradually attracted widespread attention from the international community. However, the current foreign countries mainly focus on the research on the service and security of the disabled elderly, as well as the related pension insurance system reforms, and there are few research reports on the nutritional diet evaluation of the disabled elderly. In the study of social safety net systems for disabled seniors abroad, Su and others found that many countries have established relatively complete protection systems for disabled seniors, such as Germany, the United States, and Japan [6]. However, the article mainly focuses on the research on the security system for the disabled elderly. There is no relevant evaluation on the nutritional and dietary status of the disabled elderly, and similar research reports are rare.

5. The important role of traditional Chinese medicine in the nutritional diet of the disabled elderly

Chinese medicated diet is food with traditional Chinese medicine and food as the main raw materials, traditional Chinese medicine as the theoretical basis, Chinese cooking technology as the basic method, and health preservation, fitness, and disease prevention and treatment as the fundamental purpose of food. For example, Chen a health scientist in the Song Dynasty of our country, put forward in the "Book for the Elderly" that "all elderly people should be treated with food first, and if the food is not cured, then the medicine should be given." It can be seen that the health preservation of traditional Chinese medicine and medicated diet plays an important role in the rehabilitation of the elderly. The disabled elderly have difficulty taking care of themselves, their physical fitness is weak, and they have higher requirements for nutrition. Therefore, according to the physical characteristics of the elderly, traditional Chinese medicinal diets can be made into soft foods, cakes, beverages and other food forms that are easy to digest and absorb. For example, due to the decline in the function of the spleen and stomach, the elderly can make something that is easy to digest and can enhance the spleen and stomach transport and chemical functions. Congee meals, such as Huangjing walnut porridge, Gorgon yam porridge, etc.; it can also be based on the physical characteristics of different elderly, such as the

Fuzhou Traditional Chinese Medicine Hospital of Fujian Province, they rely on the old Chinese medicine in the hospital as the core support, combined with the nutrition department of the hospital and The Department of Pharmacy and other departments jointly carried out the research work of medicated diet, and successfully developed many medicated diet drinks and foods. At present, the research and application of Chinese medicated diets abroad are well developed in Japan. Japan did not have its own medicated diet therapy culture at first, and Chinese diet therapy culture was introduced to Japan along with Chinese medicine. In recent years, Japan has recognized the limitations of modern medicine and began to pay attention to the health preservation of medicated diet. In practice, it has realized the role of medicated diet for health preservation. It not only has a good conditioning of chronic diseases of some elderly people, but also has almost no side effects. Therefore, medicated diet health preservation has been well developed in Japan. Based on the above literature studies, it is shown that Chinese medicated diet can not only meet the requirements of food, but also meet the needs of health care and conditioning. This not only has a good nutritional diet effect for the general public, but also has great potential and space worth in the disabled elderly population.

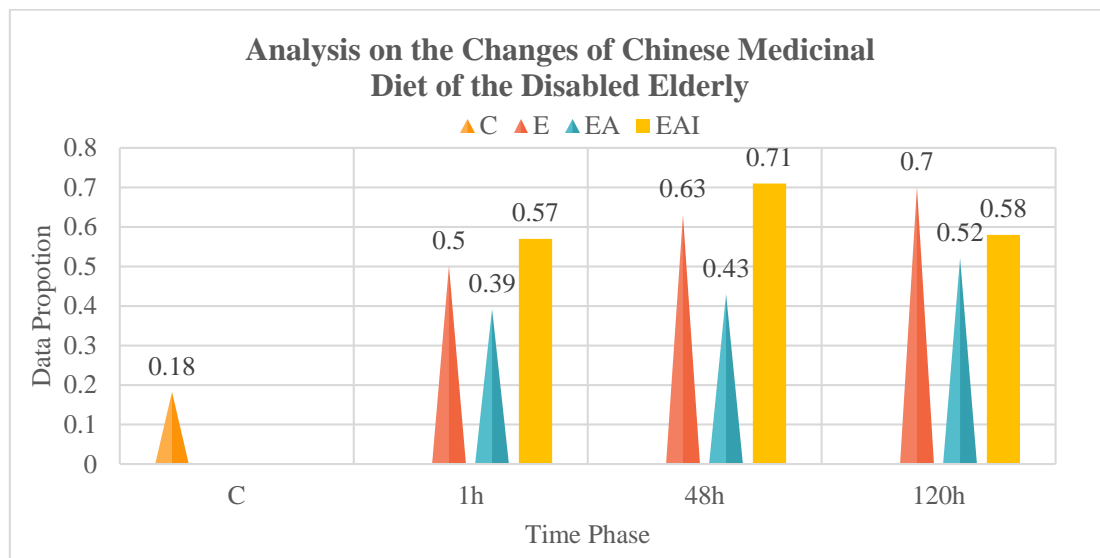


Figure. 1 Analysis on the changes of Chinese medicinal diet of the disabled elderly

6. Conclusion

With the continuous development of an aging society, China's aging society is characterized by a large base, rapid growth, and an aging population. At the same time, the country is paying more and more attention to the elderly care industry. The health and elderly care industry will be the sunrise industry in China in the future, and the demographic dividend of the aging society will return continue to exist. Chinese medicated diet is a treasure in the treasure house of Chinese medicine. It has its own unique industrial characteristics and cultural heritage. The development of Chinese medicated diet in the elderly care industry, especially the disabled elderly, has a great help in improving the nutritional status of the elderly and is extremely important social significance.

References

- [1] Kudrolli A, Chopin J.(2018). "Tension-dependent Transverse Buckles and Wrinkles in Twisted Elastic Sheets", *Proceedings of the Royal Society A Mathematical Physical & Engineering Science*, 474(2214), pp.20180062.
- [2] Kopp M, Pak D, Feldmann M.(2016). "Effects of Transverse Tension Load on the Static Capacity and Fatigue Resistance of Composite Dowels", *Steel construction*, 9(2), pp.115-121.
- [3] Xiaojun J, Yanping F, Qiang X.(2018). "Passive Wireless Measurement of Tension for Overhead Transmission Line Based on Surface Transverse Wave", *IET Generation, Transmission & Distribution*, 12(8), pp.1866-1871.
- [4] Bazhenov S L, Bobrov A V, Efimov A V.(2017). "Strain Softening of Rolled Polyethylene Terephthalate Films under Transverse Tension", *Doklady Physical Chemistry*, 476(2), pp.190-192.
- [5] Han F, Pearce C J, Ng D Q K.(2016). "A Double Button Adjustable Loop Device is

Biomechanically Equivalent to Tension Band Wire in the Fixation of Transverse Patellar Fractures—A Cadaveric Study”, *Injury*, 48(2), pp.270-276.

[6] Tien-Yu Y, Tsan-Wen H, Po-Yao C.(2018). “*Treatment of Displaced Transverse Fractures of the Patella: Modified Tension Band Wiring Technique with or Without Augmented Circumferential Cerclage wire fixation*”, *Bmc Musculoskeletal Disorders*, 19(1), pp.167.