

Application of PBL teaching method combined with case teaching method in nursing teaching of traditional Chinese medicine

Ji Chao¹Zhu Zhiying²

1. Lecturer, Donghai Science And Technology Department, Zhejiang Ocean University, Zhejiang, P.R.China
2. Student, Donghai Science And Technology Department, Zhejiang Ocean University, Zhejiang, P.R.China

ABSTRACT: The application effect of PBL teaching method combined with case teaching method in nursing teaching of traditional Chinese medicine. The students were divided into observation group and control group (more than 160 students in each group). In the process of TCM nursing teaching, the students in the control group were taught by the traditional teaching method, while the students in the observation group were taught by PBL teaching method combined with case teaching method. The theoretical test scores of the two groups were compared, and the degree of recognition of the teaching method of the combination of PBL teaching method and case teaching method was investigated in the observation group. T-test was used to compare the mean between the two groups. There was a significant difference in examination scores between the observation group and the control group. PBL teaching method combined with case teaching method can improve students' interest in learning, encourage students to think about problems from diversified angles, cultivate students' attitude towards independent self-study, improve students' problem-solving ability and train students' cooperative learning ability.

KEY WORDS: PBL teaching method; case teaching method; traditional Chinese medicine nursing; teaching

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I. INTRODUCTION

The common nursing technology of traditional Chinese medicine and the basic theory of traditional Chinese medicine are the key chapters in the course of traditional Chinese medicine nursing, and they are the most characteristic contents in the education of traditional Chinese medicine. How to make nursing students willing to learn, learn well, and finally put what they have learned into practice. In the teaching of traditional Chinese medicine nursing in recent years, the author adopted PBL teaching method combined with case teaching method to inspire students to take the initiative to learn, teamwork, and enhance students' interest in learning traditional Chinese medicine. Good teaching results have been achieved. Here are some examples of the application of PBL teaching method and case teaching method in the teaching of nursing science of traditional Chinese medicine.

II. THE ORIGIN OF PBL TEACHING METHOD AND CASE TEACHING METHOD

PBL teaching method (Problem-Based Learning) is put forward by American psychologist and educationist Jerome Bruner in the 1950s. It is also called problem-based teaching method. It is student-centered and has the basic characteristics of analyzing and solving problems through group discussion and cooperative (Yuexia et al., 2017). Learning case teaching method (Case-based Learning) was first proposed by Christopher Columbus Langdell, the former dean of Harvard Law School, in 1870. Case teaching method is teacher-led, which guides students to improve their ability to analyze and solve problems in the process of analyzing and discussing cases, which is more conducive to the realization of teaching goals (Yafang et al., 2016).

III. PRESENT SITUATION AND EXISTING PROBLEMS OF NURSING TEACHING IN TRADITIONAL CHINESE MEDICINE

The course of "Nursing of traditional Chinese Medicine" is set up in the second semester of sophomore year. Students have systematically studied the course of basic western medicine, and are used to understanding the human body from the microcosm, forming all the thinking of disease differentiation of western medicine based on the objective basis of the laboratory. The acceptance of TCM thinking methods such as "image thinking" (Liang et al., 2014), "department outside and inside" is low, coupled with the obscure text of the textbook, and there are many knowledge points. Students are often deterred from this course. The acupoints commonly used in acupuncture are difficult to remember and easy to forget, lack of logical connection between

acupoints, pain in acupuncture practice, and so on, which are like obstacles in the way, which are not conducive to the cultivation of students' interest in learning (Qingjun, 2013). Therefore, in TCM nursing teaching, we should make use of the objectivity of acupuncture and the modern research progress of TCM basic theory, combine PBL teaching method and case teaching method to cultivate students' TCM literacy, inspire students to understand the human body from a macro point of view, and achieve better teaching results.

IV. CONCRETE APPLICATION IN ACUPUNCTURE TEACHING

The inspiration for compiling the PBL teaching plan of acupuncture method comes from the article "introduction to Acupuncture and moxibustion" written by contemporary physician Lou Shaokun (Shaokun, 2017). Through raising questions, discussing questions, teachers' troubleshooting and summarizing four links, we take "how to select acupoints during acupuncture treatment" as a starting point, combined with case teaching and practical operation, so that students are happy to learn, easy to learn and put into practice.

After teaching the first chapter of the course introduction, immediately enter the study of traditional Chinese medicine nursing technology, and quickly cultivate students' interest in learning traditional Chinese medicine. Before teaching acupuncture, put forward the question of PBL discussion, divide the students into groups of 4 people, consult the relevant materials of the knowledge net, after full discussion, elect the representative to speak and explain the results of the group discussion. Structural a teaching models with the Students as the main body, and teachers should give priority to inspiration and guidance. After the students' discussion, the teacher analyzed and summarized the "five-step acupoint selection method"-- "Bazongacupoint selection method", "Bahuiacupoint selection method", "adjacent acupoint selection method", "governor pulse searching 'Ashiacupoint' method" and "disease site crossing acupoint selection method". The first step, "the method of selecting acupoints at Bazongacupoints", allows students to memorize the song formula of Bazongacupoints. When talking about the meridian tropism and orientation of acupoints, when talking about Heguacupoint, first ask the students to paste the acupoint marks on the acupoints to make a clear positioning, and then pay attention to eliminate the students' fear of acupuncture and reduce the difficulty and requirements of operation. With the short needle of 25mm, only one student in each group is required to perform acupuncture. Under the leadership of peers, the acupuncture experience rate of students can often reach more than 90%. When talking about Zusanli, take the same steps, choose the long needle of 45mm, let the students use the method of lifting and inserting and twirling on the acupoint to get a sense of deqi. The second step is the method of selecting acupoints at Bahuiacupoints. which only talks about Zhongwan and Yanglingquan. At the same time of introducing the location of acupoints, the case teaching method is introduced to describe the cases of frequent systemic spasmodic pain in patients with herpes zoster in the later stage. Only use Yanglingquan, Neiguan, Gongsun three acupoints to cure at one time, let students see the effect of acupuncture to the disease. The third step is to introduce the case of depression in the teaching of "acupoint selection in adjacent areas". Depression is a brain disease, which can be treated by Fengfu, Baihui, Yintang and Shuigou, only introducing Shuigouacupoints and playing relevant videos. The fourth step, "Governor pulse looking for 'Ashiacupoint' method", focuses on Dazhui, Zhiyang and Mingmen three acupoints, so that students can make clear the definition and function of Ashiacupoints, and have a preliminary understanding of TCM holographic theory (Weimin and Changguo, 1989). Dazhui, Zhiyang and Mingmen three acupoints correspond to upper-jiao, middle-jiao and lower-jiao diseases respectively. The fifth step, "cross acupoint selection method", describes the principle of cross acupoint selection from the functional projection map of the cerebral cortex of physiology, and plays the video of cross acupoint selection in the treatment of peri-arthritis. And give the question: when you meet an unexplained coma patient, from the point of view of acupuncture, How do you deal with it? In the face of a patient with dysmenorrhea, she has strong tenderness under the spinous process of the second lumbar vertebra on her back. How do you deal with it? Through discussion, let students skillfully master the "five-step acupoint selection method", and gradually achieve the goal of recognizing acupoints, knowing acupuncture and knowing acupuncture.

V. CONCRETE APPLICATION IN THE TEACHING OF BASIC THEORY OF TRADITIONAL CHINESE MEDICINE

Nursing students in western medical colleges and universities often label traditional Chinese medicine as "unscientific" and have a strong sense of exclusion to the theories of yin and yang and five elements and Zang-fu organs in the basic theory of traditional Chinese medicine, and take "whether the lung and large intestine are closely related" as the starting point of the question. combined with the case of acupuncture and moxibustion in COVID-19 patients, it is effective for nursing students to set up their belief in traditional Chinese medicine.

For "is there a close relationship between the lungs and the large intestine?" On this issue, we should guide the students to consult the data before the class, fully discuss it, and quote the relevant research results of the paper "Lung inflammation originating in the gut" published in science magazine in January 2018 (Mjosberget al.,

2018). Through the relevant conclusions in the paper, "the natural lymphocytes involved in the pathological processes such as homeostasis, asthma and chronic obstructive pulmonary disease will migrate from the intestinal tract to the lungs to participate in the pulmonary immune response." To explain the close relationship between lung and large intestine from the point of view of modern medicine, thus confirming the scientific nature of "the exterior and interior of lung and large intestine" in the theory of viscera.

Is there a close relationship between the lungs and the large intestine? On the basis of this problem, the acupuncture case of COVID-19 patients was introduced. In March 2020, in Leishenshan Hospital isolation ward, elderly male patients felt shortness of breath. After acupuncture and moxibustion treatment by Zou Xu, a medical member of Guangdong Hospital of traditional Chinese Medicine, the effect was immediate (Jing, 2020). In addition to Taixiacupoint, guide the students to discuss, what are the possible acupoints apart from the disease? Is it feasible to choose Heguacupoint? Why? After discussion by the students, three reasons are given: first, Hegu is the original acupoint of the large intestine meridian of the hand Yangming, the acupuncture Hegu can open the conduction function of the large intestine, the lung and the large intestine communicate with each other, and the visceral diseases are relieved from the viscera; second, the anti-epidemic famous prescription QingfeiPaidudecoction is used to treat Fructus Aurantii, and acupuncture is equivalent to the original acupoint of the large intestine meridian. Third, from the part of the elephant thinking Hegu, the tiger mouth, which is equivalent to the human throat pass, the shallow thorn to the heart and lung, the middle thorn to the spleen and stomach, the deep needling to the liver and kidney, one point to open Sanjiao, how can we not see immediate results. It once again confirms the close relationship between the lung and the large intestine.

VI. APPLICATION RESULT

The nursing students of grade 16 were treated with the traditional teaching method as the control group, and the nursing students of grade 17 adopted the PBL teaching method combined with the case teaching method as the observation group. The teaching effect was evaluated by teachers' self-evaluation, student evaluation and final assessment at the end of the period (Wei, 2013).

First of all, according to the teacher's self-evaluation, the curriculum atmosphere of nursing students at level 17 is obviously active, the students' learning enthusiasm is high, the interaction between teachers and students is positive, the curriculum atmosphere for nursing students at level 16 is dull, the students' willingness to learn is low, and the interaction between teachers and students is not smooth. Secondly, the students' evaluation scores were increased by 1.6 points, and the students' recognition of PBL teaching method and case teaching method was 91.7%. Finally, according to the final exam results, the scores of both groups were calculated according to the percentile system. 90~100 was excellent, 80~89 was good, 70~79 was medium, 60~69 was passed, and 0~59 was failed. Analyzed by SPSS statistical software, the excellent and good rate of the two groups at the end of the period was analyzed by χ^2 test, $P < 0.05$. There was statistical significance.

Table 1 Final grade distribution tables of two groups [example (%)]

Group	Number of persons	≥90	80~89	70~89	60~69	<60
Observation group	168	43 (25.6)	101 (60.1)	21 (12.5)	3 (1.8)	0
Control group	169	1 (0.6)	48 (28.4)	77 (45.6)	43 (25.4)	0

VII. DISCUSSION

Traditional Chinese medicine and western medicine understand the human body from different perspectives and ways of thinking. Nursing students have a preconception of western medicine. How to change them from "black traditional Chinese medicine" to "traditional Chinese medicine powder" is the most important problem to be solved in traditional Chinese medicine nursing teaching. The traditional teaching method of traditional Chinese medicine nursing is that teachers start from the basic theory of traditional Chinese medicine and instill the knowledge of traditional philosophy and diagnostics of traditional Chinese medicine. When learning the knowledge of traditional Chinese medicine, there is often no way to start. As the saying goes, interest is the best teacher. The problem-oriented PBL teaching method and case teaching method, combined with practical operation, make students believe what they see, encourage students to think about problems from a diversified point of view, cultivate students' independent self-study attitude, improve students' problem-solving ability, and exercise students' cooperative learning ability (Li, 2011).

PBL teaching method combined with case teaching method puts forward higher requirements for teachers' own quality and the depth and breadth of professional knowledge, which requires teachers to find a suitable breakthrough point combined with knowledge points, and better classroom organization and management ability, so as to achieve mutual benefit between teaching and learning.

REFERENCES:

- [1]. Jing, X. (2020). The patient had difficulty breathing, and a silver needle made him shout "immediate effect". In Chinese Journal of traditional Chinese Medicine (Beijing), p. 4.
- [2]. Li, L. (2011). Application of PBL teaching method in the teaching of Nursing Management. Journal of Nurses' further Education 26, 786-787.
- [3]. Liang, C., Xiabo, C., and Jiankang, W. (2014). Wang Hui talks about spirituality and clinical thinking of traditional Chinese medicine. Zhejiang Journal of traditional Chinese Medicine 49, 815-551.
- [4]. Mjosberg, Jenny, and Rao (2018). Lung inflammation originating in the gut. Science 01, 57-62.
- [5]. Qingjun, L. (2013). Discussion on the present situation and teaching plan of acupuncture and moxibustion in higher vocational colleges. Journal of Nanchang Institute of Education 08, 120-125.
- [6]. Shaokun, L. (2017). The life of traditional Chinese medicine: the strange fate of an old traditional Chinese medicine (Beijing: traditional Chinese Medicine Publishing House).
- [7]. Wei, W. (2013). Application of PBL teaching method of tongue diagnosis in pediatrics teaching of traditional Chinese medicine. Journal of Liaoning University of traditional Chinese Medicine 15, 84-85.
- [8]. Weimin, S., and Changguo, W. (1989). Holographic Theory of traditional Chinese Medicine (Chongqing: Chongqing Publishing House).
- [9]. Yafang, L., Xusheng, T., and Wei, C. (2016). A comparative study of CBL teaching method and PBL teaching method. Journal of Hebei Agricultural University (Agriculture and Forestry Education Edition) 3, 62-65.
- [10]. Yuexia, L., Guojun, Z., and Liyun, L. (2017). Application of situational teaching method combined with PBL teaching method in pre-hospital first aid teaching. Medical Teaching and Research in Colleges and Universities 07, 36-40.

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