

Teaching design of cultivating nursing students' creative thinking

LIU Xi-wen¹, NI Chun-ping², YANG Rui¹, LI Xiu-chuan¹, CHENG Cheng¹

(1. Department of Nursing, Fourth Military Medical University, Xi'an Shaanxi 710032, China;

2. School of Military Preventive Medicine, Fourth Military Medical University, Xi'an Shaanxi 710032, China)

Abstract: Chinese nursing education levels have developed fast over the past few years. Many nursing educators are devoted to the research of nursing teaching. How to cultivate nursing students' creative thinking is one of the principle researches and has received increasing attention. In the course of nursing teaching, we renewed the teaching design based on the empirical education from nursing basics as follows. The teaching contents are enlarged to make students establish a sense of nursing development and dynamic study. The traditional teacher-centered teaching methods have been replaced by diversified students-centered methods from knowledge to activities. Evaluation of learning effect is developed to be a versatile comprehensive evaluation including students' self-evaluation in accord with the multimedia teaching, group-evaluation in theoretical and discussion classes, and teachers' all-around evaluation. The new teaching design have embodied students' principal role and enhanced their abilities of creative thinking.

Key words: creative thinking; teaching design; nursing

With the development of nursing education, more and more people come to realize the importance of cultivating nursing students' creative thinking. Traditional nursing education has its own characteristics as follows: teaching contents are based on knowledge impartation, the teaching activities are teacher-centered, and the teaching form is mainly lectures made by teachers. This infusion teaching type is becoming a hindrance of students' independence and active thinking. With the changing of medical model and social development, quite amount of nursing stuff of creative thinking are required to replace the traditional nurses regarded as the doctors' assistants. Aiming at cultivating and improving students' senses and abilities of creative thinking, we renewed the teaching design based on the empirical education from nursing basics.

1. Teaching design

Creative thinking, also regarded as critical thinking, is a thinking activity for uniqueness and novelty (WANG Quan-guo, 2000, pp. 7-8). In the teaching design process, we firmly hold the principle to accelerate the all-around and harmonious development of students, and furthermore, improve their nursing creative thinking.

LIU Xi-wen, associate professor of the Department of Nursing, Fourth Military Medical University; research fields: nursing education and emergency nursing .

NI Chun-ping, Ph.D., Correspondence author, candidate of Department of Epidemiology, School of Military Preventive Medicine, Fourth Military Medical University; research fields: epidemiology and nursing education .

YANG Rui, lecture of the Department of Nursing, Fourth Military Medical University; research field: emergency nursing .

LI Xiu-chuan, assistant of the Department of Nursing, Fourth Military Medical University; research field: nursing education .

CHENG Cheng, lab assistant of the Department of Nursing, Fourth Military Medical University; research field: nursing education.

1.1 The design of teaching contents

In order to make nursing students not only focus on the books or teachers, but also establish a sense of nursing development and dynamic study, we emphasize the comprehensive and practical traits of fundamental nursing, make a recombination of clinical nursing advantages, increase new knowledge and new technology timely, such as evidence-based nursing, the development of Holism nursing care, and disposable objects (syringe, gastric tube, catheterization set, enema set, oxygen tube, etc).

1.2 The design of teaching methods

The design of teaching methods is focused on training students' abilities and qualities. Some foreign institutions have practice teaching methods which can promote the students' abilities, such as heuristic, issues-oriented, student-oriented, proximity and self-studying and discussing (LAN Sai-yu & ZHANG Yong-jing, 2003, pp. 125-127). In this phase, we broke traditional knowledge induction mode, and adopted versatile methods to make nursing students realize the change of teaching design from knowledge to activities.

1.2.1 Combination of PBL and teaching aim

Problem-based learning (PBL), which is under the teachers' instructions, taking the question as the clue, is a teaching method based on students' self-study and discussion. Combination of nursing basic teaching aim and PBL is on the premise of certain teaching aim and teachers' factors such as their knowledge, practical skills, personal attitudes, and communication skills, etc. In this phase, study problems relating to aims were chosen to make nursing students study and research gradually from different angles and inspire their divergent thinking.

1.2.2 Case-based study

Case-Based Study (CBS), is under the teachers' instructions, taking the clinical cases as the guide, to inspire students to research and study. In the process of CBS designed, firstly, the typical clinical cases should be shown to nursing students. Secondly, the questions related to clinical situations are proposed. Thirdly, students would investigate relating theories and the feasible way to solve problems. During this process, students were encouraged to questioning mutually.

1.2.3 Simulated teaching method

Intensifying the situational design in the teaching design to cultivate student' creative ability, is a necessity in the modern nursing teaching. One of the aims of nursing basic teaching is to improve students' abilities to solve practical problems. According to practical classes and some theoretical classes, the teachers should set up a real situation for clinical cases. For example, in the teaching of occupied bed-making, teachers may designedly construct the situation of being in a coma, bed-lying patient with a fracture in the legs. However, in the theory teaching of interpersonal communication, teachers should design all kinds of troublesome patients. In this way, students' imagination can be effectively triggered. At the same time, students can comprehend newly learned knowledge based on their former relative knowledge and experiences in their cognition structure. The sense and skills on clinical nursing would be cultivated from clinical thinking in their study.

1.2.4 Role playing method

According to the teaching contents such as nursing practices, nursing of patients at admission and discharge, and role theory, etc, the teachers firstly should offer some cases, then guide some students to get involved in the roles as nurses and patients, even go to platform to give a performance, while the other students have dual roles, both an audience and a judge. When the whole performance is over, students can give some appropriate comments, while the teacher just serves as a guide and judge, timely pointing out and correcting student' mistakes, affirming and praising the students with creative thinking and good skills.

1.3 The design of teaching organization

According to the different traits between nursing basic theory and practical teaching, the relative teaching group design can be operated. Theoretical classes evolve from simple large class-based teaching system to the system which adapted to the different teaching methods, for example, group discussion, individual study, etc. Practical classes can mostly be designed a combination of large class-based teaching and multimedia teaching method emphasizing the teaching reform that requires students' participation and the usage of the laboratories.

1.4 Evaluation of learning effect

Score mode of an exam paper evaluation is not suitable in cultivating of nursing students' creative thinking, so we establish a versatile comprehensive evaluation. The evaluation forms consist of students' self-evaluation in accord with the multimedia teaching, group-evaluation in theoretical and discussion classes, and teachers' all-around evaluation. The score of graduation exam on basic nursing teaching is an integrality of the participation in the daily teaching with a proportion of 10%, nursing skills and practice demonstration with a proportion of 20% and theoretical knowledge with a proportion of 60%. In the theoretical evaluation, the proportion of objective questions was decreased, and the potential creative thinking ability of nursing students was displayed. During the evaluation of nursing skills operated, a ward atmosphere and simulated situations were made previously in the nursing laboratory, and then students will perform as follows. Firstly, students were asked to find out nursing problems in the cases. Secondly, they formed nursing plan and enforced it. In the enforcing period, not mechanically but students' creation was inspired on the premise of the science.

2. The significance of new teaching design

Creativity is beneficial for individuals as well as institutions and societies since it is linked with productivity, adaptability, and health (Runco, M. A., 2004, p p. 21-30). Our new teaching design is focused on training students' creative thinking abilities. Students are the principal parts in the teaching activities.

2.1 Embody students' principal role

Traditional teaching methods can make students get quite a lot of systematic knowledge within a short time, but is not feasible to inspire their independence and potentialities (NI Chun-ping & ZHANG Ru-ying, 2001, pp. 127-128). New teaching design, including teaching methods, organization forms, effect evaluation, etc, stresses on get rid of the demerits of traditional teacher-centered education. At the same time, new teaching design aims to make the students evolve and actively explore the nursing problems, principles and methods. In the teaching process, nursing students can be changed to be principal roles from passive accepters and the objects of infusion, and the teachers mainly instruct and make comments, create a relaxing and happy atmosphere for students to make them think positively, ask boldly and explore pluckily.

2.2 Cultivate students' sense of creative thinking

The aim of advanced nursing teaching programs is to increase new knowledge for nursing students and cultivate their creative senses. In the new nursing teaching design, students are inspired and instructed to positively think in every step by the teachers. In the reciprocal learning process, the students' critical thinking and participation were inspired and their actively suspect to the nursing problems were improved. These teaching methods and organization forms broaden students' thinking to a very large extent and also change their former passive study habits, making them gradually cultivate the sense of creative thinking.

2.3 Enhance the students' abilities of creative thinking

In the activities of the creative thinking, the most critical ingredient is the cognition to relative knowledge students have accumulated. The teaching methods designed of creative thinking create an environment for students' active study and positive practice. Creations originate from problems (GONG Fang, 2000, p.57-61). Though the problem-based learning, positive thinking, discovering problems and suspect, students gradually form their own standpoints. CBS and simulated teaching method, through typical cases exhibition, situation construction, role playing, etc, improve students' abilities to act positively, actively and reciprocally with all kinds of clinical situations. CBS also makes nursing students get to know the reaction and requirements from the patients personally, inspires their curiosities and desire of learning to the most extent. In the process of solving clinical problems, anxieties of nursing students are weakened gradually, confidence and creative thinking is intensified.

3. Reflection of cultivating creative thinking

The aim of cultivating creative thinking lies in enlightening students to improve their abilities of proper questionings and constructing effective solutions. Influenced by biomedical model, traditional nursing teaching mode partially emphasizes on knowledge impartation and practical skills, leading to the result that students just mechanically take the orders and simply do the same work. In this way, the responses of the nursing objects were neglected and the thinking of the students was severely restricted. Currently, study is a process of creating the known and exploring the unknown. In order to adapt to the increasingly requirements of holism independence in the nursing practices, nursing educators must update conceptions, aim for cultivating students' creative thinking and continuously improve their creative abilities in the study process. Otherwise, nursing education won't adapt to the global development, not to say improve the development in this field.

References:

- GONG Fang & YUE Xiao-dong. (2000). Strengthening problem consciousness and cultivating creative person. *Journal of Higher Education*, (1): 57-61.
- LAN Sai-yu, ZHANG Yong-jing & LI Ling-jun. (2003). Thinking of nursing education in the 21st century of our country. *Chinese Nursing Research*, 17(2A): 125-127 .
- NI Chun-ping, ZHANG Ru-ying & HUA Qian-zhen. (2002). Application of mutual study in teaching of nursing introduction. *Chinese Journal of Nursing Science*, 17 (2): 127-128.
- Runco, M. A. (2004). Everyone has creative potential. In: R.J. Sternberg, E.L. Grigorenko & J.L. Singer. (Eds), *Creativity: From potential to realization*. American Psychological Association, Washington, DC, 21-30 .
- WANG Quan-guo. (2000). Exploring of teaching mode and cultivating creative thinking ability . *Chinese Heilongjiang Education*, (z2): 7-8.

(Edited by SHI Li-fang and REN Li-ping)