# Optimization of Emergency Nursing Curriculum System Based on Clinical Thinking Ability Cultivation

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Abstract: This paper aims to optimize the curriculum system of emergency nursing to strengthen the cultivation of students' clinical thinking ability. This paper deeply analyzes the current curriculum system of emergency nursing, which covers many dimensions such as curriculum arrangement, teaching content, teaching means and evaluation system. With the help of questionnaires and interviews, the opinions and suggestions of teachers and students on the existing curriculum system were collected. Based on these data, this paper puts forward the optimization scheme of curriculum system with the cultivation of clinical thinking ability as the core, adjusts the curriculum objectives, optimizes the teaching content, and innovatively introduces teaching methods such as case teaching and simulation training. At the same time, it also discusses how to establish a scientific evaluation system to measure the progress of students' clinical thinking ability. The optimized curriculum system can improve students' clinical thinking ability and improve teaching quality and effect. This study provides beneficial exploration and practice for the development of emergency nursing education, and contributes to cultivating more emergency nursing talents with clinical thinking ability.

#### 1. Introduction

Emergency nursing plays an important role in the clinical medical field, and its key is obvious [1]. In emergency medical situations, rapid and accurate emergency nursing intervention is often the key to save patients' lives and reduce disability [2]. No matter in the face of sudden heart attack, serious car accident injury or emergency rescue in natural disasters, the value of emergency nursing is particularly prominent [3]. This discipline not only requires medical workers to master profound technical knowledge and operational skills, but also emphasizes that they can make correct judgments and choices quickly in an emergency [4]. This highlights the core role of clinical thinking ability in emergency nursing.

By analyzing the current education system of emergency nursing, we can easily detect some defects, especially the shortcomings in the cultivation of clinical thinking ability [5]. Traditional teaching methods generally emphasize the teaching of theory and the practice of basic skills. They ignore the shaping of students' clinical thinking ability [6]. This practice makes it difficult for students to effectively translate theoretical knowledge into practical application and lack the ability to analyze and solve problems independently when encountering actual cases [7]. This situation limits the improvement of students' comprehensive quality and hinders the progress of emergency nursing education.

In view of this, the purpose of this study is to strengthen the cultivation of students' clinical thinking ability by reforming the curriculum system of emergency nursing. This paper hopes to build a more comprehensive and more clinical emergency nursing education system by updating teaching content, innovating teaching methods and improving evaluation system. This reform can improve students' clinical thinking and practical ability, and also provide a solid support for cultivating more outstanding emergency nursing talents. This study has far-reaching significance for promoting the sustainable development of emergency nursing education and improving the level of

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clinical medical service.

## 2. Analysis of the current situation of emergency nursing curriculum system

In the current field of education and vocational training, the curriculum system of emergency nursing plays an extremely important role. From the perspective of curriculum, it covers the basic theory of first aid, first aid skill operation, first aid nursing practice and many other aspects. It aims to provide students with a comprehensive and systematic knowledge system [8]. In terms of teaching content, the course not only pays attention to the transmission of theoretical knowledge, but also focuses on the training of practical skills, so as to help students achieve a balance between theory and practice. Teaching methods are mostly classroom lectures, demonstration operations, simulation drills and other forms, in order to stimulate students' interest in learning and improve the teaching effect [9]. As for the evaluation method, it is usually a comprehensive evaluation of students' learning effectiveness by means of usual grades, experimental operation, theoretical examination and so on.

In order to understand the concrete effect of the existing curriculum system, this paper collected feedback from students and teachers through questionnaires and interviews. See Table 1:

| Survey      | Number of   | Satisfaction with | Number of              | Number of          |
|-------------|-------------|-------------------|------------------------|--------------------|
| Respondents | Respondents | the Current       | Respondents Who        | Respondents Who    |
| _           | _           | Curriculum        | Believe Clinical       | Suggest Increasing |
|             |             | System (%)        | Thinking Skills        | Clinical Practice  |
|             |             |                   | Training is Inadequate | Sessions (%)       |
|             |             |                   | (%)                    |                    |
| Students    | 200         | 75                | 60                     | 85                 |
| Teachers    | 50          | 70                | 70                     | 90                 |

Table 1: Feedback Survey on the Emergency Nursing Curriculum System

Note:

Survey respondents are categorized into students and teachers, with 200 students and 50 teachers participating.

Satisfaction with the current curriculum system is expressed as a percentage, with 75% satisfaction among students and 70% among teachers.

The number of respondents who believe clinical thinking skills training is inadequate is also expressed as a percentage, with 60% of students and 70% of teachers expressing this view.

The number of respondents who suggest increasing clinical practice sessions is likewise expressed as a percentage, with 85% of students and 90% of teachers making this suggestion.

The survey found that students generally believe that the current curriculum system has done a relatively good job in knowledge coverage and skill training, but the cultivation of clinical thinking ability needs to be strengthened. Teachers pointed out that although the curriculum system includes clinical case analysis and other links, it can't be carried out in depth due to the limitation of class hours or limited teaching resources. This leads to students' clinical thinking ability not being fully exercised.

Through sorting out and analyzing these feedbacks, this paper recognizes that the existing curriculum system does have defects in the cultivation of clinical thinking ability. On the one hand, there is a lack of modules for clinical thinking training in curriculum design. This makes it difficult for students to make decisions quickly when facing complex cases [10]. On the other hand, teaching and assessment methods pay too much attention to knowledge memory and skill proficiency, ignoring the cultivation of students' ability to analyze and solve problems. In the aspect of training clinical thinking ability, the curriculum system still has great room for improvement. In view of this, in order to cultivate more emergency nursing talents with clinical thinking ability, it is necessary to carefully optimize and adjust the curriculum system and pay more attention to the cultivation of students' clinical thinking and practical ability.

#### 3. Based on clinical thinking ability training curriculum system optimization strategy

In view of the shortcomings of the curriculum system of emergency nursing in cultivating students' clinical thinking ability, this section puts forward a series of improvement measures, as shown in Table 2:

Table 2: Improvements for Cultivating Clinical Thinking Skills in the Emergency Nursing Curriculum System

| Improvement Measure                | Implementation Method     | Expected Outcome                       |
|------------------------------------|---------------------------|--|
| Introduce case-based teaching to   | Classroom discussion,     | Improve students' analysis and         |
| analyze real clinical cases        | group analysis            | problem-solving skills, learn from     |
|                                    |                           | predecessors' experiences              |
| Implement simulation training to   | Simulation, role-playing  | Enhance students' emergency            |
| enhance emergency response and     |                           | response and decision-making           |
| decision-making abilities          |                           | abilities in actual clinical settings  |
| Strengthen the deep integration of | Combine practical and     | Ensure students have a solid           |
| clinical practice and theoretical  | theoretical courses       | theoretical foundation and experience  |
| knowledge                          |                           | the authenticity of clinical practice  |
| Develop diversified teaching       | Multimedia teaching,      | Stimulate students' interest in        |
| methods to promote clinical        | online learning resources | learning, broaden their clinical       |
| thinking development               | -                         | thinking horizons                      |
| Establish a feedback mechanism     | Regularly collect         | Continuously optimize improvement      |
| for clinical thinking cultivation  | feedback from students    | measures to ensure cultivation effects |
|                                    | and teachers              |  |

In order to achieve the goal, this paper reorganized the course content. We emphasize the close combination of clinical practice and theoretical knowledge to ensure that students can experience the complexity and variability of clinical practice while mastering a solid theoretical foundation. Based on this, this paper thinks that innovative teaching methods such as case teaching and simulation training can be introduced. This paper also studies and establishes a scientific and reasonable evaluation system to measure the progress of students' clinical thinking ability. Traditional evaluation methods focus on knowledge memory and skill proficiency, which ignores the investigation of students' clinical thinking ability. Therefore, we have developed a series of diverse evaluation tools, including clinical case analysis, simulated situational decision-making, oral reports and so on, to comprehensively evaluate students' clinical thinking ability.

Table 3: Assessment System for Clinical Thinking Skills in the Emergency Nursing Curriculum System

| Assessment         | Assessment Tool           | Assessment           | Assessment                        |
|--------------------|---------------------------|----------------------|-----------------------------------|
| Dimension          |                           | Method               | Standards/Indicators              |
| Clinical case      | Clinical case analysis    | Written response,    | Accuracy of analysis,             |
| analysis           | questions                 | group discussion     | problem-solving ability,          |
|                    |                           |                      | logical thinking, etc.            |
| Simulated scenario | Simulated clinical        | Practical operation, | Decision-making speed,            |
| decision-making    | scenarios                 | role-playing         | adaptability, teamwork, etc.      |
| Oral presentation  | Students' oral            | Individual           | Clarity of expression,            |
|                    | presentations on clinical | presentation, group  | completeness of content,          |
|                    | cases or simulation       | presentation         | logical thinking, etc.            |
|                    | training                  |                      |                                   |
| Clinical thinking  | Students' reflections and | Journal              | Depth of thinking,                |
| journal            | insights during clinical  | submission,          | self-reflection ability, learning |
|                    | thinking training         | teacher feedback     | attitude, etc.                    |
| Peer evaluation    | Students' mutual          | Peer evaluation      | Accuracy of peer evaluation,      |
|                    | evaluation of             | form, group          | objectivity, cooperative          |
|                    | performance in clinical   | discussion           | attitude, etc.                    |
|                    | thinking training         |                      |                                   |

For example, Table 3 shows a scientific and reasonable evaluation system established to comprehensively evaluate students' clinical thinking ability. Including clinical case analysis, simulated situational decision-making, oral reports and other diverse evaluation tools. In order to measure students' performance more accurately, specific evaluation criteria are also defined for each evaluation dimension. These evaluation methods can reflect students' knowledge level and reveal their thinking process, decision-making ability and adaptability. This can provide teachers with more accurate and comprehensive student evaluation information.

## 4. Effect and prospect of optimizing curriculum system

The optimized curriculum system of emergency nursing can achieve remarkable results. First of all, it will greatly improve students' clinical thinking ability. With the rearrangement of course content and innovative teaching methods, students will constantly hone and enhance their clinical thinking in the combination of theoretical study and practical operation. They will be taught how to quickly analyze problems, make decisions and implement effective nursing measures in the face of complex clinical situations. The enhancement of this ability will help students achieve excellent results during their school days and lay a solid foundation for their future career path. The optimized curriculum system pays more attention to students' initiative and participation to stimulate their learning enthusiasm and enthusiasm. Teachers will lead students to actively think and explore through case studies, simulation operations and other teaching strategies, so as to enhance teaching effectiveness. In addition, the established scientific evaluation system will also provide solid support for the improvement of teaching quality.

Looking forward to the future, this paper thinks it is necessary to continuously optimize the curriculum system. With the continuous development of medical technology and the continuous improvement of emergency nursing practice, the curriculum system also needs to keep pace with the times to meet new needs and face new challenges. Possible research directions include how to further improve the training effect of clinical thinking ability, how to better integrate theory and practice, and how to use modern technology to assist teaching. This paper also found that the development trend of emergency nursing education is to pay more attention to practicality and innovation, and to emphasize students' subjectivity and participation. In the future, we will continue to work hard to make greater contributions to training more emergency nursing talents with clinical thinking ability.

#### 5. Conclusions

This paper deeply analyzes and optimizes the curriculum system of emergency nursing. The optimized curriculum system of emergency nursing can achieve remarkable results in improving students' clinical thinking ability. Through careful reorganization of course content and flexible application of innovative teaching methods, students can master solid theoretical knowledge and exercise their ability to analyze and solve problems in simulated clinical practice. The improvement of this ability enables students to make correct judgments and decisions more calmly and quickly in the face of real emergency situations. Teachers' teaching ideas and methods have been updated, paying more attention to guiding students to think and explore actively, which has stimulated students' interest and enthusiasm in learning. In addition, the establishment of a scientific and reasonable evaluation system also provides a strong guarantee for the improvement of teaching quality. This makes the teaching effect more objective and comprehensive.

The improvement of curriculum system is a never-ending process. In the future practice, we need to explore and improve constantly to adapt to the continuous progress of medical technology and the continuous development of emergency nursing practice. Relevant personnel can continue to pay attention to the growth of students' clinical thinking ability, emphasize the combination of theory and practice, and devote themselves to cultivating more emergency nursing talents with excellent quality and professional ability.

To sum up, it is of great significance to optimize the curriculum system of emergency nursing. I

believe that through continuous efforts and practice, we can make greater contributions to the education and development of emergency nursing and contribute our strength to the cause of human health.

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#### References

- [1] Xiaoyue Gao, Jingjing Dai, Weijun Yuan, et al. Establishment and Application Evaluation of a Virtual Simulation Teaching Platform for Emergency Care of Craniofacial Trauma Patients [J]. Shanghai Journal of Stomatology, 2023, 32(4): 437-442.
- [2] Yanbei Chen, Ping Yao, Xiaoli Pan, et al. Construction and Application of PBL Combined with Scenario Simulation in GTCS Nursing Emergency Training [J]. Journal of Kunming Medical University, 2024, 45(11): 181-185.
- [3] Biaoxin Zhang, Lulu Wang, Changjun Fang, et al. Development of Objective Structured Clinical Examination Cases for Undergraduate Nursing Interns Based on Clinical Thinking Ability Cultivation [J]. Journal of Nursing, 2023, 30(18): 23-26.
- [4] Jiyu Zhang, Kaifei Li, Houmei Feng, et al. Exploration and Practice of Emphasizing the Cultivation of Clinical Diagnostic Thinking Skills for Laboratory Medicine Physicians [J]. Chinese Journal of Experimental Diagnosis, 2024, 28(3): 377-378.
- [5] Guixia Xu, Xiuchuan Li, Chunfang Liu, et al. Research on the Cultivation of Clinical Thinking Ability in Nursing Students Based on Objective Structured Clinical Examinations [J]. Journal of Bengbu Medical College, 2024, 49(3): 415-420.
- [6] Ya Miao, Xiangping Luo, Beibei Wang. Analysis of Midwifery Clinical Thinking Abilities and Influencing Factors in Some District Hospitals in Hangzhou City [J]. Chinese Health Statistics, 2021, 038(006): 902-904.
- [7] Shanbing Hou, Min Dou, Lanlan Yang, et al. Current Status of Clinical Thinking Ability among Medical Students and Its Relationship with Autonomous Learning Ability for Emergency Management [J]. Anhui Medicine, 2024, 45(8): 1044-1049.
- [8] Xuebei Hou, Guiyuan Qiao, Huijuan He, et al. Teaching Design for Cultivating Nursing Students' Clinical Thinking Ability under the Background of Integration of Competition and Education [J]. Chinese Medical Education Exploration, 2024, 23(03): 419-423.
- [9] Yiming Li, Pinghua Yang, Qin Shi, et al. Construction of a General Practitioner Multi-disease Co-management Clinical Thinking Ability Evaluation System Using the Delphi Method [J]. Chinese Journal of General Practitioners, 2024, 23(02): 140-145.
- [10] Jixia Cheng, Lilin Yao, Jun Zhang, et al. The Value of Case Analysis Combined with Role Inspiration in Surgical Nursing Training to Enhance Thinking Ability [J]. Chinese Medical Education Exploration, 2022, 21(10): 1401-1404.