

# A Study on Aligning Nursing Curriculum with Hospital Clinical Competency Requirements

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**Abstract:** The purpose of this study is to coordinate the alignment between the nursing curriculum and hospital clinical competencies, identify the reasons for the gaps, evaluate the impact of these gaps on the nursing profession, and propose strategies to bridge these gaps. This study will help strengthen nursing education, improve nursing students' skills, and help students adapt to complex clinical environments.

**Keywords:** Nursing education; Clinical competency; Hospital requirements; Curriculum alignment; Gap analysis

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## 1. Introduction

The alignment of the nursing curriculum with hospital clinical competency requirements is a critical factor in preparing nursing graduates to meet the demands of modern healthcare environments. As healthcare systems become increasingly complex and patient needs more diverse, it is essential that nursing education programs evolve to provide students with the skills and knowledge necessary to excel in clinical settings <sup>[1]</sup>. A well-aligned curriculum ensures that nursing graduates are not only theoretically proficient but also practically competent, thereby enhancing their readiness to deliver high-quality care from the outset of their careers <sup>[2]</sup>.

Recent studies underscore the importance of regularly updating nursing curricula to reflect current clinical practices and emerging healthcare trends. For instance, the integration of simulation-based learning has been shown to significantly improve clinical decision-making and technical skills among nursing students <sup>[3]</sup>. Additionally, incorporating interprofessional education into the nursing curriculum can foster collaboration and communication skills, which are essential for effective patient care in multidisciplinary teams <sup>[4]</sup>. These educational strategies help bridge the gap between academic preparation and real-world clinical requirements, thereby facilitating a smoother transition for nursing graduates into professional practice.

The nursing profession demands a high standard of clinical competency to ensure patient care quality and safety. With the rapid evolution of healthcare and increasing patient acuity, the gap between educational curricula and clinical requirements has become a pressing issue. This paper explores the purpose of aligning

nursing education with clinical practice, emphasizing the importance of a curriculum that reflects current healthcare needs and prepares students for the challenges they will face in their professional lives.

The nursing education landscape is fraught with challenges, including adapting to technological advancements, addressing the diverse needs of patient populations, and preparing for an increasingly complex healthcare environment. Curriculum alignment is essential for producing graduates who are competent and confident in their clinical skills. Misalignment can lead to a skills gap, affecting patient outcomes and nurse job satisfaction.

The primary purpose of this study is to identify discrepancies between the nursing curriculum and the competencies required in hospital settings. By understanding these gaps, educators can better tailor their programs to equip students with the necessary skills and knowledge.

This study seeks to answer several key questions: What are the current gaps between nursing curricula and clinical requirements? How do these gaps impact nursing students and patient care? What strategies can be employed to bridge these gaps effectively?

## **2. Literature review**

### **2.1. Current status of nursing education**

The sudden outbreak of COVID-19 in the winter of 2019 has put China's healthcare industry through a severe test <sup>[5]</sup>, also seen in other countries. In COVID-19, the important position of nurses has been greatly highlighted, and their professional skills also need to be further improved.

Contemporary nursing educators not only focus on imparting professional knowledge and skills but also need to focus on cultivating teaching innovation and educational research capabilities. For the training of nursing students, the goal should be to meet the changing needs of nursing practice.

Lane and Kohlenberg described the challenges and needs of current nursing education <sup>[6]</sup>. With the development of the nursing industry, high-quality nursing educators have become increasingly important. These educators not only need to have teaching skills and educational leadership but also solid clinical experience and professional knowledge.

Kavanagh and Sharpnack discussed the important challenges and opportunities facing the current nursing education field <sup>[2]</sup>. Faced with the increasingly complex medical environment and patient needs, the skill level and preparation of nursing students are not fully matched. Oermann and Shellenbarger pointed out that the current practice of nursing education is characterized by diversity and dynamic development <sup>[7]</sup>. Clinical practice is an irreplaceable part of nursing education. In the clinical practice link, students' clinical skills can be cultivated, theoretical knowledge can be combined with practice, and it helps students transform theoretical knowledge into practical operation skills.

### **2.2. Expectations in the clinical requirements**

As the primary setting for clinical practice, hospitals place specific requirements and expectations on nurses that are critical to ensuring high-quality patient care. These requirements and expectations cover a wide range of competencies, from technical to interpersonal skills, designed to provide comprehensive and effective healthcare services. Hospitals require nurses to have a high level of technical competency in the use of a variety of medical equipment and clinical procedures. This includes competency in medication management, wound care, intravenous therapy, and the operation of complex diagnostic tools. Proficiency in these technical skills is essential to ensure safe and effective patient outcomes.

In the dynamic and often high-pressure environment of a hospital, nurses must demonstrate strong critical

thinking and decision-making skills. They need to quickly analyze patient data, identify changes in patient conditions, and make informed decisions about interventions.

### **2.3. Challenges of implementing curriculum and practice**

Educational theory and clinical practice are two essential components of nursing education. Theoretical learning of nursing is the basis of practice, while clinical practice provides an application environment for theoretical learning. For many years, the gap between theoretical education and clinical practice in nursing has been controversial, mainly because schools have not adjusted their teaching strategies according to the problems in clinical practice. Another reason may be the unexpected events encountered in clinical practice. For example, the outbreak of the COVID-19 epidemic in 2019. The outbreak of this type of major public health event not only brought great troubles to the people but also brought unprecedented challenges to hospital staff.

Clinical practice is one of the important components of nursing education. Students need to transfer theoretical learning to the actual operation of caring for patients. These operations affect the safety and physical health of patients, and may also affect the contradictions between patients and hospitals. Therefore, the gap between the two has attracted the attention of a wide range of scholars. The goal of this study is to explore the gap between educational theory and clinical practice in nursing professional training, analyze the reasons, and the impact of these gaps on nursing students, and propose strategies to narrow the gap between educational theory and clinical practice of nursing students.

### **3. Factors contributing to the gap**

The gap between nursing education theory and clinical practice refers to the difference between the theoretical knowledge learned by students in the classroom and the events encountered in clinical practice<sup>[8]</sup>. This is a particularly practical work. We will review some literature from the perspectives of nursing teachers and students to understand the views on the gap from different perspectives. Experts have been working hard in the field of nursing to bridge the gap between theory and practice, strengthen nursing education research, deepen nursing education reform, and ensure that students are more competent in internships<sup>[9,10]</sup>.

From the perspective of nursing teachers, studies have shown that the perception of the gap is related to the education level of nurses<sup>[11,12]</sup>. In actual nursing patients, clinical nurses experience a lack of education. In response to this problem, how to better transfer the learning of nursing students' theoretical courses to clinical practice has attracted the attention of scholars. Carless-Kane and Nowell listed the reasons that affect the integration of educational theory and clinical practice through research in their article<sup>[13]</sup>. These reasons include that students are not recognized by educators and their requirements are not met. More importantly, students lack a clear understanding of the relevance of theoretical knowledge to practice. Therefore, students face the challenge of transferring theoretical knowledge into clinical practice. Studies have found that providing adequate resources, appropriate guidance, and sufficient practice time are essential for nursing students to acquire clinical skills and successfully integrate theory into practice. Nursing teachers play a vital role in students' clinical practice<sup>[14]</sup>.

From the students' perspective, there are many factors that affect their accumulation of clinical practice experience. In addition to some personal factors, some factors come from clinical teachers. Other factors are insufficient educational theory, lack of confidence, and no way to combine theory with practice<sup>[15]</sup>. Especially after experiencing COVID-19, many nursing students are taught online without a real teaching environment<sup>[16]</sup>. This deepens the default gap between theory and practice<sup>[17]</sup>. This will lead to reduced learning ability and inefficiency among students. From this point of view, experiential learning is more conducive to the growth

of nursing students. Through research, it was found that students' lack of self-confidence is directly related to clinical practice<sup>[18]</sup>.

Kavanagh and Sharpnack mentioned in their article that the first reason for the gap is the rapid development of technology<sup>[2]</sup>. The rapid development of technology has brought new possibilities to education, but it has also increased the learning burden for students. Another reason is that in real life, the increasing complexity of medical events requires nursing students to have more advanced clinical skills and decision-making skills. Traditional ethics teaching models may not be able to fully meet these requirements. Finally, the gap between nursing education and real clinical practice was emphasized, including the fact that the educational curriculum is not promptly updated to keep up with the changes in medical practice, and the impact of limited educational resources and funds on the quality of education.

#### **4. Implications of the gap**

The gap between theoretical learning and clinical practice in nursing will have the following impacts on nursing students.

- (1) Insufficient clinical operation skills: After receiving theoretical knowledge, students often face the challenge of practical operation. With only theoretical knowledge and a lack of clinical practice experience, nursing students will feel at a loss in actual work and find it difficult to skillfully operate various nursing techniques<sup>[19]</sup>. This gap may lead to students' lack of self-confidence and skills in actual nursing work, affecting their overall understanding and application skills of the profession. This may also affect patient safety and nursing quality.
- (2) Insufficient professional self-confidence: The disconnect between theoretical knowledge and practical skills will make nursing students feel that their professional skills are insufficient, and thus lack the confidence to deal with complex clinical situations<sup>[20]</sup>. This may cause nursing students to be hesitant and lack initiative in their work.
- (3) Increased sense of professional burnout: In the absence of clinical practical experience, nursing students are prone to feel stressed and helpless when working, and are prone to frustration and professional burnout. This may affect their enthusiasm and motivation for nursing<sup>[21]</sup>.
- (4) Insufficient communication skills: Poor communication skills make it difficult to smoothly transition roles. From school to work, nursing students need to adapt to the roles and responsibilities of nurses as soon as possible. However, they face challenges at work due to communication problems, and the disconnect between theoretical knowledge and practical experience will make this transition process more difficult and arduous.
- (5) Affecting employment prospects: The gap between theory and practice may also affect the career development and satisfaction of nursing students. The lack of practical experience and skills may make them face greater challenges in the workplace and find it difficult to adapt to the rapidly changing needs of nursing practice, thus affecting the development and sense of accomplishment in their careers. When applying for jobs and promotions, nursing students who lack clinical experience often find it difficult to compete with their peers. Therefore, this poses a great challenge to nurses' employment opportunities and career development space.
- (6) Affecting patient satisfaction: Students feel uncomfortable when entering internship or work environments because they lack sufficient practical experience to deal with complex clinical situations, making it difficult to provide high-quality nursing services. This discomfort may lead to a decline in

nursing quality, affecting patient safety and nursing effectiveness. It may also reduce patient satisfaction with nursing work, thereby damaging the social image of the nursing industry.

In nursing education, if the gap between theory and practice is not effectively addressed, there may be other adverse effects in addition to the listed effects. Therefore, in order to improve the quality of nursing education and the comprehensive ability of students, relevant strategies should be formulated in a timely manner to change the status quo in order to meet the challenges brought about by the development of modern health technology.

## 5. Strategies to bridge the gap

The impact of the gap between theory and practice on nursing students cannot be ignored. This is not only related to the individual learning experience and career development of students but also directly affects the quality of nursing services and patient safety. Through educational reform and the increase of practical experience, the negative impact of this gap can be effectively reduced, and the quality of nursing education and students' professional skills can be improved.

- (1) Increasing opportunities for practical experience: Saifan *et al.* explored students' perceptions of this gap, emphasizing their desire for practical experience and their expectations for improvements in the education system <sup>[19]</sup>. Students generally hope that educational institutions can provide more practical opportunities and improve curriculum design to better integrate theoretical knowledge and practical skills training. Experienced clinical instructors are invited to provide guidance to nursing students and help them apply the theoretical knowledge they have learned to practical situations <sup>[22]</sup>. Communication and support between teachers and students are strengthened to better prepare them to meet the challenges and demands of the nursing profession.
- (2) Improving curriculum design: School administrators can re-evaluate course content and teaching methods to better integrate theoretical knowledge and practical skills training. For example, teaching strategies such as case analysis and simulation exercises can be used to help students apply what they have learned to actual nursing scenarios, thereby improving their practical operation and problem-solving skills. In addition, in modern nursing education, some schools have adopted emerging technologies. For example, virtual reality and simulation training technologies have been gradually introduced, providing students with a more realistic and safe clinical experience in learning, and enhancing their decision-making skills and ability to deal with complex situations. Educators need to pay more attention to interdisciplinary integration and practice-oriented teaching methods when designing courses. In this way, it can ensure that students can cope with the rapidly changing clinical environment when they graduate.
- (3) Strengthening soft skills training: School administrators should also cultivate students' skills such as teamwork, leadership, and effective communication. The cultivation of these soft skills can enable students to cope with complex medical environments more calmly and effectively through classroom discussions, role-playing, professional development workshops, and so on.
- (4) Promoting interdisciplinary cooperation and practical innovation: Morrell *et al.* mentioned the importance of interdisciplinary cooperation and practical innovation <sup>[20]</sup>. In order to better promote the integration of theory and practice, we can cooperate with other disciplines, such as sociology, information technology, psychology, and other disciplines. This can inject new thinking and methods into nursing education. Promoting cooperation between different disciplines can help students

understand the importance of teamwork and improve role cognition and communication skills.

The gap between theory and practice has a multi-faceted impact on nursing students, involving learning experience, career development, and nursing quality. By increasing opportunities for practical experience, improving curriculum design, strengthening soft skills training, and strengthening teacher-student interaction and support, the negative impacts of this gap can be effectively reduced, and the quality of nursing education and students' overall ability can be improved.

## 6. Conclusion

This paper presented the reasons for the gap between theoretical learning and clinical practice in nursing education and reviewed relevant literature to discover the impact of these gaps on the nursing profession. In addition, strategies to solve these gaps are proposed based on the literature. The issue must be taken seriously, and bridging the gap between theoretical learning and actual nursing work will help improve students' comprehensive abilities and work skills. In the future, the development of nurses will rely on bridging the gap between theory and practice.

## Disclosure statement

The authors declare no conflict of interest.

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