

Teacher-student Interaction Mode in Master Degree Nursing Students: A Qualitative Research

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Abstract: Teaching interaction refers to various functions and influences between the teachers and students, it is of great value of student-teacher connection and bonding in the clinical setting. However, many studies showed the problems exist in clinical teaching setting. At present, most of researches on the clinical practice of nursing postgraduates with professional degree focuses on the clinical practice effect and clinical practice experience, the researches on the teacher-student interaction behavior in clinical practice is insufficient. Objective To explore Teacher-student interaction mode of master degree nursing students, the quality of interaction and the factors influencing interaction. Method Semi-structured interviews were used to conduct face-to-face interviews with 14 master degree nursing students and 8 clinical teachers. The interview content mainly includes the interaction mode, the quality of interaction and the factors influencing interaction. The data obtained were analyzed using Colaizzi analysis. Results The teaching interaction mode mainly includes: task-driven mode, establishing model mode and problem-oriented mode. Interaction quality includes: invalid interaction, non-information interaction, benign interaction. Factors affecting interaction includes: lack of time, characteristic of teachers, self-positioning of students are unclear, lack of systematic practice plan. Conclusion There is a certain problem in interaction between master degree nursing students and clinical teachers which should be emphasized.

Keywords: Master Degree Nursing Students, Interaction, Clinical Setting

1. Introduction

World Health Organization (WHO) Strategic Directive for Nursing by pointing out that “investing in nursing means moving towards universal access and coverage of health, which will have a profound effect on overall health and well-being [1]. In January 2010, the Academic Degree Office of the State Council approved the Master of Nursing Specialist [2], whose aim is to cultivate senior nursing practitioners who have strong clinical analysis and thinking ability, as well the ability to solve common nursing problems independently in the professional field, and strong ability in the research and teaching [3]. Nursing specialist Gillespie has emphasized the value of the student-teacher connection and bonding in the clinical setting [4], good teacher-student interaction in clinical

setting can not only improve the clinical practice ability, mastery of specialty knowledge and speculative ability to solve the practical problems of nursing postgraduates with professional degree, but also enhance the professional satisfaction, role self-realization and participation of clinical practice teaching of clinical educators. However, many studies showed the problems exist in clinical teaching setting, such as without standardized teaching process, lack of core competence of educators, unclear of teaching objectives and so on [5-7]. Previous research pointed out that a complete teaching process should include Analyze learners, State objectives, Select media and materials, Utilize materials, Require learner performance, and Evaluate/revise the learning and teaching process [8]. The World Health Organization has characterized the core competencies of nursing educators divided into eight domains which including: (1) ability to

understand educational theories, and principles and models of curriculum design related to health education and adult learning; (2) ability to design, implement, monitor and manage curricula based on best available evidence; (3) ability to maintain current knowledge and skills in theory and practice; (4) ability to develop critical inquiry, conduct research and utilize findings to identify problems and solve them; (5) ability for effective communication and teamwork, and interdisciplinary collaboration enhancing partnership among health education and clinical practice professionals; (6) ability to demonstrate professionalism including legal, ethical and professional values in developing nursing education policies, procedures and decision making; (7) ability to monitor and evaluate educational programs curricula and student learning with differing methods; (8) ability to manage, lead and create educational programs and shape the future of education institutions. Meanwhile, most experts think teaching objectives of MNS postgraduates should be greater reliance on evidence for optimal practice and critical thinking [9].

At present, most of researches on the clinical practice of nursing postgraduates with professional degree focuses on the clinical practice effect [10-12] and clinical practice experience [13-15], the researches on the teacher-student interaction

behavior in clinical practice is insufficient. The purpose of this study is to explore the interactive teaching model, quality and influencing factors of the clinical practice teaching between nursing postgraduates with professional degrees and clinical teaching teachers, so as to provide theoretical basis to make the improvement of the clinical practice teaching.

2. Study Subject

Inclusion criteria: (1) Master of Nursing with Professional Degree: The full-time Master of Nursing with Professional Degree; Clinical practice time is longer than 6 months; Has finished the rotation of at least two departments (2) Clinical teaching teachers: Has more than 5 years' work experience in the clinical nursing; With the title more than senior nurse; Being a nursing educator for more than one year; Bachelor degree or above; Accepted training on cultivating and teaching master degree nursing students; Volunteered to participate in this study.

A total of 22 respondents were included in this study, including 14 full-time professional degree nursing postgraduates and 8 clinical teaching teachers. The demographics of study subject could be seen in table 1.

Table 1. Demographics of study subject

| General Information of 14 Master of Nursing Graduates with Professional Degrees | | | | | General Information of 8 educators | | | | | |
|---|--------|-----|-----------------------|-----------------|------------------------------------|--------|-----|------------|----------------|-----------------------|
| No. | Gender | Age | Grade | Work Experience | No. | Gender | Age | Work Years | Teaching Years | Title |
| S1 | Female | 27 | Graduate First Grade | Yes | T1 | Female | 31 | 13 | 8 | Nurse practitioner |
| S2 | Female | 24 | Graduate First Grade | None | T2 | Female | 38 | 12 | 8 | Nurse practitioner |
| S3 | Female | 24 | Graduate First Grade | None | T3 | Female | 37 | 16 | 10 | Nurse practitioner |
| S4 | Female | 23 | Graduate First Grade | None | T4 | Female | 38 | 15 | 12 | Nurse practitioner |
| S5 | Female | 23 | Graduate First Grade | None | T5 | Female | 42 | 25 | 20 | Supervisory Nurse |
| S6 | Female | 23 | Graduate First Grade | None | T6 | Female | 47 | 27 | 25 | Deputy Director Nurse |
| S7 | Female | 25 | Graduate First Grade | Yes | T7 | Female | 45 | 25 | 23 | Supervisory Nurse |
| S8 | Female | 27 | Graduate First Grade | Yes | T8 | Female | 47 | 27 | 25 | Deputy Director Nurse |
| S9 | Female | 23 | Graduate First Grade | None | | | | | | |
| S10 | Female | 21 | Graduate First Grade | None | | | | | | |
| S11 | Female | 24 | Graduate Second Grade | None | | | | | | |
| S12 | Female | 25 | Graduate Second Grade | None | | | | | | |
| S13 | Female | 24 | Graduate Second Grade | None | | | | | | |
| S14 | Female | 24 | Graduate Second Grade | None | | | | | | |

3. Research Methods

3.1. Interview Outline Development

A semi-structured face-to-face in-depth interview method was adopted in this study. The interview outline was based on the cognitive field theory, the gestalt theory of learning and Hergenhahn's behavioral change model [16-18]. Cognitive field theory pointed out that "The teacher can promote learning in the clinical setting or can discourage it; the teacher...becomes a significant variable in establishing a learning environment in the clinical" In gestalt theory, learning occurs when experiences allow newly learned principles to be applied to both familiar and unfamiliar situations. In

Hergenhahn's behavioral change model, learning is viewed as experiences leading to behavioral change. Each of these theory were used in developing the interview questions, designing the study approach using grounded theory methods [19], and comparing study findings with results.

Demographics of study subject included grade, the length of the clinical practice, clinical experience before the admission of the nursing postgraduates with professional degree; the academic qualifications, positions, titles, teaching age of clinical teaching teachers, etc. Opening questions includes "How do you interact with your clinical teacher (student) in the practice?" "What do you think of the interaction quality in the clinical practice teaching?" "What factors do you think affect the clinical teaching interaction?" and so on.

3.2. Data Collection Process

This study was conducted by the same researchers at the first affiliated hospital of Jinan university from May 1, 2019 to May 31, 2019. All volunteers were informed about the study's purpose and gave written permission for recorded in-depth interviews. After obtaining the interviewees' knowledge and consents, the basic data of the interviewees were collected. We choose the time when the interviewees were free of work, then conduct the formal interviews in a quiet and undisturbed demonstration room. In the course of the interview, avoiding interruption and evaluation of the interviewees. Question closely when the presentation was unclear, so that to fully obtain the required data. The whole interview process were recorded, and the interviewees' mood, expression and body movements were observed. The interview time and the number of the interviewees were ended with the data collection was saturation.

3.3. Data Analysis Method

Each interview was transcribed verbatim from an audiotape, and then coded and analyzed using the Colaizzi seven-step analysis method. The objects marked S1~S14 represent the professional master of the nursing students, and T1~T8 represent clinical teachers. Two researchers translated the recording verbatim into text, reading it over and over again, extracting meaningful key words, analyzing and summarizing meaningful repetitive ideas, sublimating the concept of the subject, and hand it to a third expert for the decision if there are uncertainties or unable to reach an agreement. The results were verified by returning to the interviewees.

4. Results

4.1. Clinical Teaching Interactive Model

There were three main models of teaching interaction between nursing postgraduates with professional degrees and clinical teaching teachers, including task-driven mode, model-setting mode and problem-oriented mode.

4.1.1. Task-driven Model

In this model, the clinical teachers asked students to repeat some simple basic nursing operation tasks frequently. For example, student S1: "Teachers have always asked me to give patients venipuncture, which makes me feel that it is difficult to learn anything new except this." Teacher T2: "If there is no clinical work, undergraduate students directly into graduate students (classmates), need more basic operation or to practice more."

4.1.2. Setting an Exemplary Model

Under this model, the instructors often demonstrate the main nursing process and operation criteria for the students, and then ask the students to provide comprehensive nursing for the patients independently. For example, student S4: "I am in ICU Department now. When a critically ill patient comes, the teachers often in a hurry but they can do everything in an

orderly way, which makes me admire them very much. So that I hope I would like to become a nurse like them one day." Teacher T7: "I would like to show them (Master of Nursing with Professional Degree) my routine work process, teach them key points of observation and nursing patients, and encourage and provide opportunities for them."

4.1.3. Problem-oriented Model

Under this model, the instructors will put forward some questions which are most urgently in clinical for students,, inspiring them to think and solve the practical clinical problems, cultivating their ability to find and solve problems, and helping them forming scientific research thinking. For example, student S11: "Teachers will ask me what's wrong with doing this, let me try to find ways to improve it." Teacher T8: "The most important task of the clinical practice for nursing postgraduates is to find new problems in standard nursing process, and then solve them with scientific and rigorous evidence-based methods."

4.2. Quality of Teaching Interaction

The teaching interaction quality between nursing postgraduates with professional degrees and clinical teachers has three results: Ineffective interaction, non-information interaction and benign interaction.

4.2.1. Invalid Interaction

This situation is mostly happened when the clinical teachers lack of ability or knowledge so that can not achieve the teaching target. For example, student S5: "When we ask her some questions, she seldom gives us a professional explanation, and let us think less, which make me have less expectant for the nursing industry." Teacher T2: "I may have good clinical ability, meanwhile I may lack of the ability of scientific research and not possess sufficient professional knowledge."

4.2.2. Non-information Interaction

In this case, the interaction content between teachers and students only about the topic of life, which lack the content related to the clinical teaching. For example, student S12: "There are many daily exchanges in life, and few discussions about scientific research or clinical problems." Student S4: "There are some things they don't want to talk to us, maybe they think that we know it."

4.2.3. Benign Interaction

In this case, the interaction was a kind of the interaction that makes both teachers and students feel satisfied. On the one hand, the students can acquire the knowledge and skills that they need in the clinical practice, on the other hand, teachers' teaching ability and knowledge have been further improved. For example, student S3: "My teacher asked me some questions, then I feedback some knowledge. Our interaction was a benign process." Teacher T1: "I think that clinical teaching is a process of teaching and learning. I have also learned a lot of new knowledge from students."

4.3. Factors Affecting Teaching Interaction

The factors influencing the teaching interaction between nursing postgraduates with professional degrees and clinical teaching teachers mainly include the following factors.

4.3.1. Heavy Workload of Clinical Teachers

The most commonly mentioned problem by teachers and students is the heavy workload of clinical teachers, which make teachers lack of time to interact with students. For example, student S8: "He (clinical teaching teacher) can't finish his own work, and doesn't care about us at all." Teacher T6: "I will be very busy when I have a lot of patients to look after. I don't have enough time to discuss with them (nursing graduate students), but this is my job which I have to do first."

4.3.2. The Self-orientation of Nursing Postgraduates Is Not Clear

Many nursing postgraduates with professional degrees cannot clearly define their purpose and significance in the clinical practice, and they would not take the initiative to acquire the knowledge they need from their teachers, thus causing obstacles to teaching interaction. For example, student S10: "I just come to collect patient data, so I seldom communicate with the instructor." Teacher T2: "They may have a sense of superiority, but I think, as students, they should do every basic work steadily."

4.3.3. The Characteristics of Teachers

Through the teacher's expression and some students' reflection, it is found that the teacher's personality, expression ability and teaching ability will affect the quality of teaching interaction. Teachers with the characteristic of outgoing, articulate and experienced are tend to create an efficient interaction. For example, student S6: "The kind of teacher who is more lively and likes to teach us, I would like to communicate with her more, but those who looked serious I do not like to deal with" Teacher T6: "When they asked me questions, I would like to tell them and if they didn't I will not. Because I don't know what they want to know."

4.3.4. Lack of Systematic Clinical Practice Teaching Plan

Many teachers and students have mentioned that there is no systematic clinical practice teaching plan in the department at present, so that there is little difference between the clinical practice teaching of graduate students and undergraduate students. The improper arrangement of teaching teachers affects the interaction between teachers and students. For example, student S4: "There is no specific teaching plan, and there is no difference between the undergraduate students and undergraduates." Teacher T5: "Many graduate students and teachers are not fixed, I think it is more conducive to the teaching interaction to get familiar with a teacher."

5. Discussion

Teaching interaction refers to various functions and influences between the teachers and students, whose purpose

is to promote the teaching value [20]. Efficient clinical teaching interaction can meet different clinical practice demands of nursing postgraduates, and improve the career satisfaction, role self-realization and participation of clinical practice teaching of clinical teachers. Through phenomenological research method, this paper discusses the mode, quality and influencing factors of the clinical teaching interaction between professional degree nursing master students and clinical teachers.

5.1. Clinical Teaching Interactive Model

This study found that there are three kinds of teacher-student interaction modes in clinical teaching of professional degree nursing postgraduates, among which task-driven mode was the most common teaching interaction mode. Some studies [21] showed that task-driven model could improve the theoretical knowledge, operational skills and practical ability of nursing students who firstly contacted the corresponding specialty fields. Therefore, in the early stages of the professional degree nursing graduate students in the clinical practice, "Task-driven model" can be used, but with the deepening of the clinical practice, when the degree of the nursing master graduate student has skilled nursing process and operating norms, "Setting an exemplary model" and "Problem-oriented model" should be more applied in the teaching interaction. "Setting an exemplary model" can promote the cultivation of students' ability of clinical analysis and independent solving of nursing problems in professional fields, so as to better realize professional socialization. "Problem-oriented model" can cultivate their thinking and scientific research ability, which is also an important core ability of nursing postgraduates to distinguish themselves from nursing students with other degrees.

5.2. Quality of Teaching Interaction

This study found that the clinical teaching interaction between teachers and students of nursing graduate students is mostly "Invalid interaction" and "Non-information interaction", and only a few are "Benign interaction". This may be related to the individuality of the clinical teaching teachers, the ability of communication, and the ambiguity of clinical teaching objectives of nursing postgraduates with professional degrees [22]. Therefore, standardized training for clinical teaching teachers, especially the ability of communication should be strengthened. After entering the clinical department, both teachers and students should make clear the teaching objectives of clinical practice. Some experts suggest that the clinical teachers should be selected in accordance with their professional knowledge, communication and teaching ability [23] and different teaching teams should be established to train them, such as basic nursing skills, nursing specialties, nursing management, teaching teams of scientific research groups [24].

5.3. Factors Affecting Teaching Interaction

This study shows that the influencing factors of teaching

interaction include "Large workload of clinical teaching teachers", "Short effective communication time", "Unclear self-orientation of nursing postgraduates", "Characteristics of teaching teachers" and "Lack of systematic clinical practice plan". It is suggested to increase teaching posts or give teachers some teaching time, etc. Or the group learning mode of undergraduate nursing students and higher vocational students [25] can be adopted by the postgraduates of professional nursing degrees to relieve the teaching pressure of the clinical teachers and cultivate the teaching ability of postgraduates of professional nursing degrees. In addition, various interactive forms of the clinical practice can be adopted [26], such as the department lecture hall, typical case discussion, department nursing rounds, assisting head nurse management, nursing specialist outpatient service, etc., to increase the positive interaction between teachers and students in clinical practice. Studies show that high degree of "Self-determination" is closely related to positive factors such as "Engagement", and has a positive impact on students' learning and attitude [27]. In the clinical teaching, psychological intervention can be used to enhance students' "Self-determination", and professional degree nursing master students can be encouraged to participate in all aspects of clinical practice.

6. Conclusion

At present, although many scholars have discussed the training system of the nursing postgraduates in various specialties and the construction of the evaluation index of the clinical competence [28-31], meanwhile some scholars also have suggested learning from the experience of APN postgraduate training abroad [32], there are still "Unclear positioning" and "Lack of systematic clinical practice teaching plan" and other problems in the clinical practice of the nursing postgraduates with professional degrees in China. There are few studies on the interaction of the clinical practice teaching between teachers and students of nursing postgraduates with professional degrees. We are looking forward to conducting further research on the clinical teaching plan and the teacher-student interaction model in China.

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