A Qualitative Study on the Influencing Factors of Training Transfer for Oral Specialist Nurses

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Abstract: *Objective:* Through interviews with oral specialist nurses, to explore the influencing factors of training transfer for oral specialist nurses, and provide references for scientifically improving the effect of specialist nurse training transfer. *Methods:* Using purposive sampling and descriptive qualitative research, 15 oral specialist nurses from two tertiary hospitals in Guangdong Province were selected for semi-structured interviews, and data analysis was performed. *Results:* After collating and analyzing the interview data, three types of factors affecting the training transfer of oral specialist nurses were proposed, including personal characteristics, training management, and training transfer atmosphere. *Conclusion:* Managers should formulate a comprehensive and systematic plan based on the influencing factors of oral specialist nurse training transfer to effectively promote training transfer behavior and enhance training transfer effects.

Keywords: Oral specialist nurses; Training transfer; Qualitative research

1. Introduction

The "Healthy Oral Action Plan (2019–2025)" developed by the National Health Commission proposes to give full play to the role of specialized nursing and cultivate compound talents capable of oral health education, nursing, and prevention [1]. Studies have shown that some oral specialist nurses only stay at the stage of learning theoretical knowledge and operational skills, lacking the ability to translate what they have learned into actual nursing behavior, resulting in difficulties in sustaining the training effect in their work [2]. Training transfer, which effectively translates the professional knowledge and skills acquired during training into work practices, is a core aspect of ensuring the quality of oral nursing [3]. Baldwin and Ford proposed a model for the training transfer process that includes trainer personal traits, training design, and work environment, which they believe affect training transfer effect indicators [4]. This study intends to analyze interview results based on the Baldwin and Ford model, summarizing relevant influencing factors of oral specialist nurse training transfer as a strategic basis for

improving training effectiveness.

2. Objects and methods

2.1. Determination of research team

The team consists of 5 members, including 1 chief nursing officer, 1 deputy chief nursing officer, 3 nursing supervisors, and other team members who collaborate and divide the work.

2.2. Interview subjects

From April 2023 to November 2023, 15 oral specialist nurses from two tertiary hospitals in Guangdong Province were selected as samples using purposive sampling. Inclusion criteria: (1) Working experience in oral nursing ≥ 1 year; (2) Informed consent for the interview; (3) Obtained training certificate and practice qualification certificate. Based on the actual needs of the interview, the final sample size is determined based on the principle of no new themes and saturation of information. The number of interviewees included was 15 (**Table 1**).

Table 1. General information of interview subjects ($n = 15$)

Interviewee serial number	Age (years old)	Education	Title	Position	Years of oral nursing work (years)
N1	52	Bachelor's degree	Associate chief nursing officer	Head nurse	33
N2	35	Master's degree	Nurse-in-charge	Clinic nurse	6
N3	35	Bachelor's degree	Nurse-in-charge	Clinic nurse	8
N4	29	Master's degree	Nurse	Clinic nurse	3
N5	39	Bachelor's degree	Nurse-in-charge	Head nurse	9
N6	41	Bachelor's degree	Associate chief nursing officer	Head nurse	16
N7	43	Bachelor's degree	Nurse-in-charge	Clinic nurse	10
N8	35	Bachelor's degree	Nurse-in-charge	Clinic nurse	12
N9	46	Bachelor's degree	Nurse-in-charge	Clinic nurse	24
N10	36	Bachelor's degree	Nurse-in-charge	Head nurse	5
N11	30	Bachelor's degree	Nurse	Clinic nurse	4
N12	45	Bachelor's degree	Nurse-in-charge	Clinic nurse	18
N13	33	Bachelor's degree	Nurse-in-charge	Clinic nurse	3
N14	44	Bachelor's degree	Nurse-in-charge	Head nurse	22
N15	44	Bachelor's degree	Nurse-in-charge	Clinic nurse	20

2.3. Perfecting the interview outline

Based on grounded theory [5], an interview outline was designed, and relevant literature was retrospectively analyzed. Team members were guided to conduct a preliminary analysis of the interview outline. Subsequently, two oral specialty nurses were selected to conduct a pre-interview. The results of the pre-interview were analyzed, the interview outline was adjusted, and the final version of the interview outline was clarified (**Table 2**).

Table 2. Interview outline

Serial number	Interview topic
1	What are your thoughts and feelings about your experience with oral specialty nurse training?
2	Are you able to proficiently apply the nursing knowledge and skills learned during training in your actual work?
3	What difficulties have you encountered when applying training knowledge during actual work?
4	What factors influence your ability to apply training knowledge during actual work?
5	What kind of assistance do you need when applying the knowledge learned during training in your actual work?

2.4. Data collection

One-on-one in-depth interviews were conducted using a semi-structured approach. The interview outline was used as the main thread for the interviews, and the questioning method was flexibly adjusted according to the on-site situation to ensure the rigor of the interviews. Each interview was limited to 30 minutes, and the interviewees were informed beforehand that the interview content would be recorded. Recording equipment was activated after the interviewee agreed.

2.5. Data analysis and quality control

The data management and analysis software Nvivo 11.0 was selected. Interview subject coding was completed according to the actual interview order, and independent archiving services were provided for each interview subject. Relevant data related to research questions were organized, and themes were extracted using the Colaizzi 7-step analysis method [6]. The interviewer maintained a neutral state throughout the interview process. Two interview staff transcribed the interview content within 24 hours and organized it into textual data.

3. Results

3.1. Personal factors

3.1.1. Personal ability

Personal ability refers not only to the learning ability of specialized training content but also to the ability to effectively transform and apply learned content to work after specialized learning. Interview results showed that 10 interview subjects indicated that oral specialty nurse training could improve their professional abilities. N3 stated, "Through this specialized nurse training, I have improved my mastery of professional knowledge and technical operations." N13 said, "I have gained a lot from the specialized nurse training. I completed a nursing case and participated in an oral health education competition." N11 explained changes in nursing work methods after receiving specialized nurse training using the example of health education for patients with removable dentures. N14 mentioned, "After the training, when I encounter problems in my work, I will search for literature to conduct evidence-based practice."

3.1.2. Training transfer motivation

Interview results showed that the main motivations for training transfer among the interview subjects were to absorb new knowledge, improve personal abilities, and achieve self-worth through training; a few interviewees were motivated by meeting leadership expectations or accompanying nurses at the same level. N5 stated, "I like learning, and through training, I can learn a lot of new knowledge, not just four-handed operation but also

management, infection control, etc., which gives me a lot of satisfaction." N10 said, "I want to learn some new knowledge and apply it in clinical work." N9 mentioned, "It's a work requirement, and I'm learning with my colleagues."

3.2. Training management
3.2.1. Training content and methods
All 15 interviewees indicated that the content and methods of training can affect the effectiveness of specialized nurse training, which in turn affects the effectiveness of training transfer. N2 stated, "The training method combines theory with practice, but for me personally, the practical part accounts for a relatively small proportion, which affects my application after the study is finished." N8 said, "The systematization of theoretical training is particularly important for the training of specialized nurses." N6 added, "I believe that scientific research knowledge is also important in specialized nurse training, but there is too little relevant content in actual training."

3.2.2. Teacher management
The interview results showed that the level of instructors can affect the learning experience of specialized nurses, and the impact on training effectiveness cannot be ignored. This also has a certain impact on training transfer. N9 commented, "Most of the training content and practical operations are very practical, but some teachers speak very fast, and I haven't absorbed this part of the knowledge before they start the next part." N11 said, "There are differences in the teaching levels of different training classrooms, which leads to differences in my mastery of the training content." N13 added, "The teaching ability of the instructor actually has a great impact on the degree of knowledge received by the students."

3.3. Training transfer atmosphere
3.3.1. Organizational support
Fifteen interviewees stated that support from management is a decisive factor affecting the effectiveness of specialized nurses' work. N2 said, "The department leaders attach great importance to my specialized nurse studies. After the studies are finished, they arrange for me to report, and everyone is very enthusiastic." N4 added, "Without the support of the department, it would be difficult to carry out the work." N11 stated, "After the training, some of my ideas were adopted by the leaders, and implementation can be considered as smooth as if assisted by divine intervention." N1 commented, "I am mainly responsible for management in the department, and compared with nurses who received the same batch of training, I have indeed had a smoother time carrying out the work." N15 said, "When feeding back new ideas for department improvement to my superiors, they didn't quite understand, which led to difficulties in implementation."

3.3.2. Department learning atmosphere
Thirteen interviewees indicated that a good learning atmosphere is particularly important for training transfer effectiveness. N3 stated, "It's not enough for just me to have this knowledge. If it's the entire department, a team, then the effect can be optimized." N4 added, "The department needs to have a good learning atmosphere where I can share and everyone can discuss." N7 said, "Some department members lack the motivation to learn and receive new knowledge and skills." N15 concluded, "Someone must be willing to learn, and everyone must make progress together to improve the professional technical ability of the entire department."

3.3.3. Application opportunities

Eleven interviewees indicated that although they had learned a lot of knowledge during the specialized nurse training, they had no opportunity to apply it to practical work. They maintained their pre-training work status in areas such as clinical patient care and health education. N14 stated, "I am too busy with my daily work, and my schedule is fully packed with routine tasks." N8 said, "After returning to my department, there was no difference in my work content compared to before the training. I was too busy to follow the learned standards for health education." N12 expressed, "When applying training knowledge to clinical work, I always encounter difficulties, such as the need for doctors' cooperation with new techniques and skills, but some doctors are resistant to accepting new knowledge."

4. Discussion

4.1. Stimulating transfer motivation and cultivating job competency

The results of this study show that the transfer motivation of oral specialized nurses has a significant positive effect on training transfer effectiveness, which is consistent with the findings of Wang *et al.* [7]. It is suggested that managers strengthen the personal capacity building of oral specialized nurses during training, invite specialized nurses with rich transfer experience to share methods and techniques, and help learners better integrate their knowledge into practice. Most interviewed nurses believe that training not only improves their professional level but also provides opportunities for their career development. This motivation promotes training transfer effectiveness. To fully stimulate this transfer motivation, it is recommended to establish a scientific reward and punishment system, conduct regular evaluations of specialized nurses' work effectiveness, and provide appropriate recognition and rewards. Simultaneously, a clear career development path should be provided for specialized nurses to stimulate their professional enthusiasm and pride, enhance their work engagement, and ultimately improve training transfer effectiveness.

4.2. Optimizing training methods and standardizing teacher management

The interview results indicate that training content, methods, and teachers significantly affect the training transfer effectiveness of oral specialized nurses after returning to their jobs. Ju *et al.* also proposed that appropriate training content and a good training environment can improve training transfer effectiveness [8]. Lv *et al.* validated the importance of training teachers in their study on stroke specialized nurses [9]. Regarding training methods, diverse and interactive innovative teaching approaches can be adopted to enhance learners' participation and learning effectiveness. Simultaneously, emphasis should be placed on the practicality of training, providing sufficient practical opportunities and simulated environments. In terms of training content, a unified training outline should be established to ensure that the training content closely matches the actual work needs of oral specialized nurses, emphasizing practicality and operability. The training content can be set in stages, gradually deepening, and should be updated to ensure its cutting-edge and effectiveness. Regarding training teachers, it is essential to ensure that they can provide authoritative and professional guidance to learners, possess excellent teaching skills and communication abilities, and stimulate learners' enthusiasm and motivation.

4.3. Create a transfer climate and enhance the work autonomy of specialized nurses

The interview results indicate that the post-training transfer environment has a significant impact on training

transfer effectiveness. Studies have shown that managers providing a positive organizational climate can enhance employees' proactive behavior [10,11]. Zhang *et al.*'s research also suggests that China currently lacks a comprehensive management system for specialized nurses and urgently needs to establish a climate that promotes positive training transfer for specialized nurses [12]. Therefore, hospital administrators should provide platforms for specialized nurses to improve their knowledge level, encourage re-training and scientific research innovation for oral specialized nurses, establish a learning organization culture, set up reward mechanisms, and encourage specialized nurses to teach what they have learned to other nurses in the department. At the same time, it is necessary to regularly evaluate and provide feedback on the training outcomes of oral specialized nurses, promptly identify problems, and make adjustments and improvements to maintain the effectiveness and sustainability of the training.

5. Conclusion

This study found that individual characteristics, training management, and training transfer climate are the main factors that affect training transfer effectiveness. There are certain limitations in this study. The interview subjects were all from tertiary hospitals in Guangdong Province. In the future, different levels and regions of hospitals should be selected for further exploration, and the influencing factors of training transfer effectiveness for oral specialized nurses should be analyzed from multiple perspectives. Comprehensive programs should be developed by drawing on the experience of foreign oral specialized nurses and domestic nurses to enhance the quality of training transfer.

Disclosure statement

The authors declare no conflict of interest

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