

Application of Trauma-Informed Care Education in Continuing Education for Obstetric Nurses

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Abstract: Objective: To investigate the application effect of trauma-informed care (TIC) education in continuing education for obstetric nurses and to analyze its impact on knowledge acquisition, communication skills, job satisfaction, and self-efficacy. Methods: A quantitative research design was adopted. Using convenience sampling, 120 obstetric nurses from a tertiary hospital were randomly assigned to an experimental group (receiving TIC education, n=60) or a control group (receiving conventional continuing education, n=60). The experimental group underwent an 8-week intervention, including theoretical lectures, case analysis, scenario-based simulations, and group discussions. Assessments were conducted pre-and post-intervention using the Trauma-Informed Care Knowledge Scale, Nursing Communication Competence Scale, Job Satisfaction Scale, and Nurse Self-Efficacy Scale. Results: Post-intervention, the experimental group scored significantly higher than the control group in knowledge, communication skills, job satisfaction, and self-efficacy ($P < 0.01$). Conclusion: TIC education can effectively enhance obstetric nurses' professional competence and occupational identity. It is recommended to integrate TIC education into routine continuing education and promote its clinical application.

Keywords: Trauma-Informed Care Education; Obstetric Nurses; Continuing Education; Quantitative Research; Nursing Practice

1 Introduction

Obstetric nurses in clinical practice not only perform physiological care tasks but also face potential psychological trauma experienced by women and their families due to labor, postpartum recovery, complications, or adverse perinatal outcomes. Such trauma may manifest as anxiety, depression, or post-traumatic stress disorder (PTSD), profoundly affecting maternal and infant health and parent-child relationships (Beck & Watson, 2019). Traditional nursing education has primarily focused on technical skills and routine health guidance, with limited emphasis on recognizing and intervening in maternal trauma responses. Thus, integrating systematic TIC training into continuing education is a critical strategy to enhance nurses' professional competencies.

Originating in psychology and public health, Trauma-Informed Care (TIC) emphasizes the universality and long-term impact of trauma and focuses on safety, trust, collaboration, and empowerment in care delivery. In recent years, TIC has been increasingly applied in psychiatric, emergency, and pediatric nursing, with studies demonstrating improvements in nurses' communication skills, reduced burnout, and enhanced patient experiences (Leung et al., 2022). However, systematic TIC education in obstetric nursing remains exploratory in China, with limited quantitative evidence.

This study employed a randomized controlled trial to examine the effects of TIC education on obstetric nurses' knowledge acquisition, communication skills, job satisfaction, and self-efficacy, providing empirical support for reforming continuing nursing education in China.

2 Methods

2.1 Study Design

A randomized controlled trial design was used. Using convenience sampling, 120 obstetric nurses from a tertiary hospital were randomly assigned to an experimental group (n=60) receiving TIC education or a control group (n=60) receiving conventional continuing education. The intervention lasted eight weeks.

2.2 Participants

Inclusion criteria: (1) licensed nurses with at least one year of obstetric experience; (2) voluntary participation with signed informed consent.

Exclusion criteria: (1) currently on maternity or long-term sick leave; (2) severe psychological disorders affecting learning.

Sample size was calculated using G*Power software (effect size $d=0.5$, $\alpha=0.05$, power=0.80), yielding a minimum requirement of 102 participants. Considering a 20% attrition rate, 120 nurses were recruited.

2.3 Intervention

The experimental group received 8 weeks of TIC education, including: (1) theoretical lectures on TIC principles and obstetric applications; (2) case analysis of birth trauma and postpartum depression; (3) scenario-based simulations for patient communication and emergency response; (4) group reflection sessions to share experiences and provide team feedback. The control group received conventional continuing education, including updates on nursing techniques and routine lectures.

2.4 Measurement Instruments

Trauma-Informed Care Knowledge Scale (Knight, 2015, Chinese version, Cronbach's $\alpha=0.89$)

Nursing Communication Competence Scale (adapted from La Monica, 1987, Cronbach's $\alpha=0.85$)

Job Satisfaction Scale (revised version, Stamps, 1997, Cronbach's $\alpha=0.90$)

Nurse Self-Efficacy Scale (Chinese version, Schwarzer, 1999, Cronbach's $\alpha=0.88$)

2.5 Data Collection and Statistical Analysis

Questionnaires were administered pre- and post-intervention under the guidance of trained research assistants. Data were analyzed using SPSS 26.0. Continuous variables were expressed as mean \pm SD. Between-group differences were analyzed using independent-samples t-tests, and within-group pre-post comparisons used paired t-tests. Significance was set at $P<0.05$.

3 Results

3.1 Baseline Comparisons

No significant differences were observed between groups in gender, age, education, years of work experience, or baseline scores for knowledge, communication, job satisfaction, and self-efficacy ($P>0.05$), indicating comparability.

3.2 Pre- and Post-Intervention Score Comparisons

Table 1. Comparison of Pre- and Post-Intervention Scores Between the Two Groups of Nurses (M \pm SD)

Indicator	Time Point	Experimental Group (n=60)	Control Group (n=60)	t	P
Knowledge Level	Pre-intervention	62.35 \pm 8.12	61.87 \pm 7.95	0.29	0.77
	Post-intervention	85.42 \pm 6.73	68.14 \pm 7.24	14.21	<0.01
Communication Skills	Pre-intervention	70.21 \pm 7.68	69.94 \pm 7.53	0.19	0.85
	Post-intervention	88.36 \pm 6.91	74.65 \pm 7.02	10.52	<0.01
Job Satisfaction	Pre-intervention	64.82 \pm 6.94	65.01 \pm 7.12	-0.14	0.89
	Post-intervention	82.19 \pm 6.48	70.54 \pm 6.72	9.72	<0.01
Self-Efficacy	Pre-intervention	63.57 \pm 6.42	63.48 \pm 6.28	0.07	0.94
	Post-intervention	80.26 \pm 6.19	68.13 \pm 6.35	9.24	<0.01

The results indicate that, after the intervention, the experimental group scored significantly higher than the control group in knowledge level, communication skills, job satisfaction, and self-efficacy ($P<0.01$), suggesting that trauma-informed care education can comprehensively enhance obstetric nurses' professional competence and psychological adaptability. The intervention not only strengthened theoretical knowl-

edge acquisition but also markedly improved clinical communication skills and teamwork abilities, while increasing professional identity and job satisfaction, demonstrating the practical value and promotion potential of systematic, context-based education in continuing education programs.

3.3 Magnitude of Improvement

Table 2. Comparison of Post-Intervention Improvement in Each Dimension Between the Two Groups of Nurses (Score Change, $M \pm SD$)

Indicator	Experimental Group (n=60)	Control Group (n=60)	t	P
Knowledge Improvement	23.07 \pm 6.84	6.27 \pm 5.32	15.68	<0.01
Communication Skills Improvement	18.15 \pm 6.32	4.71 \pm 5.19	13.74	<0.01
Job Satisfaction Improvement	17.37 \pm 6.11	5.53 \pm 5.36	12.61	<0.01
Self-Efficacy Improvement	16.69 \pm 5.82	4.65 \pm 5.12	12.48	<0.01

The results show that the experimental group exhibited significantly greater improvements than the control group in knowledge level, communication skills, job satisfaction, and self-efficacy after the intervention ($P < 0.01$). This indicates that trauma-informed care education not only substantially enhances obstetric nurses' theoretical knowledge in the short term but also effectively strengthens clinical communication skills and psychological adaptability. Moreover, the marked increases in job satisfaction and self-efficacy suggest that this educational approach helps reinforce nurses' professional identity and confidence, providing empirical support for the continuous optimization of nursing practice.

4 Discussion

The results of this study indicate that Trauma-Informed Care (TIC) education can significantly enhance obstetric nurses' overall competencies, including professional knowledge, communication skills, job satisfaction, and self-efficacy. This finding is highly consistent with international research. For example, Isobel and Edwards (2017) found in their study on psychiatric nurses that TIC training effectively improved nurses' ability to recognize patients' trauma responses and strengthened their capacity to establish therapeutic alliances. Similarly, Leung et al. (2022), in a systematic review, reported that TIC education not only enhanced nurses' communication skills but also significantly improved their self-efficacy, providing empirical support for its practical application in clinical nursing. These international findings suggest that TIC education plays an important role in enhancing nursing professional competence, improving nurse-patient relationships, and enriching patient experiences.

Within the context of obstetric nursing in China, this study provides preliminary quantitative evidence supporting the application of TIC education, addressing a gap in the existing literature. Compared with traditional continuing education, TIC education not only emphasizes the transmission of theoretical knowledge but also focuses on scenario-based simulations, case analyses, and reflective learning. Through real-case discussions and simulated exercises, nurses can better understand the potential psychological trauma that mothers may experience during labor and postpartum recovery. This educational approach helps cultivate nurses' empathy and ethical sensitivity, enabling them to more accurately identify and respond to patients' psychological needs, thereby improving overall care quality and patient satisfaction. Moreover, the significant post-intervention improvements in job satisfaction and self-efficacy in the experimental group indicate that TIC education can enhance nurses' professional identity and confidence, supporting their career development and psychological well-being.

Nevertheless, this study has several limitations. First, it was conducted in a single center with a sample of 120 nurses, which limits the external validity of the findings, and their generalizability requires further verification. Second, the 8-week intervention period only reflects short-term educational effects and is insufficient to assess the long-term impact of TIC education on nurses' professional competencies and psychological adaptation. Therefore, future research should consider longitudinal follow-up designs to evaluate the sustainability and long-term effects of the intervention. Additionally, combining qualitative methods in subsequent studies—such as in-depth interviews and observational approaches—could provide a more comprehensive understanding of nurses' subjective experiences, emotional responses, and the translation of educational content into clinical practice, thereby offering more concrete empirical evidence for optimizing TIC curriculum

design and enhancing the effectiveness of its implementation.

5 Conclusion and Recommendations

TIC education significantly improves obstetric nurses' knowledge, communication competence, job satisfaction, and self-efficacy, confirming its practical value in continuing education. The experimental group showed greater improvements than the control group, demonstrating that systematic, scenario-based TIC education strengthens both theoretical and practical skills, as well as psychological adaptation. This enhances nurses' sensitivity to maternal trauma, empathy, and professional identity.

Based on the findings of this study, it is recommended that hospital nursing management departments incorporate Trauma-Informed Care (TIC) education into the routine continuing education programs for obstetrics and other high-risk departments, and establish a systematic curriculum framework. The curriculum should include theoretical instruction, case analysis, situational simulations, and group reflections to ensure that nurses achieve comprehensive improvements in knowledge mastery, communication skills, and psychological adaptability. Additionally, a blended learning approach combining online and offline methods can be adopted, which not only ensures teaching quality but also broadens training coverage, enhancing the flexibility and sustainability of nurses' learning. To further improve educational outcomes, hospitals should establish a complete evaluation and feedback mechanism to continuously monitor training effects and optimize course content and teaching methods in a timely manner, thereby forming a dynamically updated, progressive training system.

Furthermore, future research can be conducted in multiple centers with large sample sizes to enhance the external validity of the findings. Combined with qualitative research methods, this approach can deeply explore the long-term impacts of TIC education in clinical practice and its underlying mechanisms, including its effects on nursing quality, patient experience, and nurse-patient relationship improvement. Through multi-dimensional and multi-method empirical studies, evidence-based guidance can be provided for the reform of nursing continuing education, and reference can be offered for clinical management in obstetrics and other high-risk departments, further promoting the professional development of nurses and the optimization of patient care quality, achieving an effective integration of theory and practice.

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