

A Cross-Sectional Survey of Turnover Intention and Its Influencing Factors among Clinical Nurses

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Abstract: *Objective:* To investigate the current level of turnover intention among clinical nurses and to identify the demographic, occupational, and psychological factors associated with it, thereby informing strategies for workforce retention. *Methods:* Using convenience sampling, an online questionnaire survey was administered to 281 nurses at a Grade A tertiary hospital in Foshan between October and December 2025. The survey combined a self-designed general information form with four validated instruments assessing change fatigue, emotional exhaustion, job satisfaction, and turnover intention. Group differences were examined through univariate analysis, and the associations among variables were evaluated using Pearson correlation and multiple linear regression. *Results:* The mean turnover intention score was 12.40 ± 4.38 , reflecting a medium-low level. Turnover intention differed significantly by department and monthly night-shift frequency ($p < 0.05$): it was higher among internal-medicine nurses and rose as night shifts became more frequent, whereas age, marital status, education, tenure, position, and prior experience of organizational change showed no significant effect ($p > 0.05$). Turnover intention was positively associated with change fatigue ($r = 0.429$) and emotional exhaustion ($r = 0.523$) and negatively associated with job satisfaction ($r = -0.429$; all $p < 0.001$). Regression analysis confirmed all three psychological variables as independent predictors—with emotional exhaustion contributing most—together explaining 32.0% of the variance. Further mediation testing indicated that emotional exhaustion and job satisfaction jointly mediated the effect of change fatigue on turnover intention, with the indirect pathways accounting for 60.86% of the total effect. *Conclusion:* Turnover intention among the surveyed nurses is at a medium-low level and is shaped jointly by work-setting factors (department and night-shift load) and psychological factors (change fatigue, emotional exhaustion, and job satisfaction). Managers are advised to optimize scheduling, ease change fatigue and emotional exhaustion, and strengthen job satisfaction, so as to curb turnover and stabilize the nursing workforce.

Keywords: Clinical nurses; Turnover intention; Change fatigue; Emotional exhaustion; Job satisfaction; Influencing factors; Survey

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1. Brief overview

Studies have shown that emotional exhaustion and job satisfaction play partial mediating roles between change fatigue and nurses' turnover intention, with the total indirect effect reaching 60.86%. Change fatigue can influence turnover intention either directly or via mediating paths. According to the job demands-resources model, frequent organizational changes coupled with insufficient supportive resources tend to trigger change fatigue and emotional exhaustion. Emotional exhaustion weakens professional identity and raises turnover intention; meanwhile, change-related stress reduces job satisfaction. The indirect effect of change fatigue through emotional exhaustion accounts for 44.11%, and a chain mediating pathway exists. Managers should adopt multi-pronged measures: improve communication and training, optimize workflow to ease change fatigue; establish psychological support systems to mitigate emotional exhaustion; optimize welfare and promotion systems to boost job satisfaction, so as to comprehensively reduce nurses' turnover intention and stabilize nursing talents.

2. Objects and methods

2.1. Research objects

A convenience sampling method was adopted to select on-the-job nursing staff from a Grade A tertiary hospital in Foshan from October to December 2025 ^[1].

2.1.1. Inclusion criteria

- (1) Possess a valid nurse practicing certificate;
- (2) Engaged in clinical nursing for at least 1 year;
- (3) Continuously employed in the current hospital for ≥ 6 months;
- (4) Able to independently complete the questionnaire with full understanding of its contents;
- (5) Voluntarily participate with informed consent.

2.1.2. Exclusion criteria

- (1) Nurses receiving further education, external training or long-term off-post assignments;
- (2) Nurses on maternity leave, sick leave or other long holidays;
- (3) Intern nurses and staff without practicing certificates;
- (4) Those who experienced major life events within the past 3 months (e.g. severe illness, death of immediate family) that may significantly affect mental status;
- (5) Invalid questionnaires with answering time < 3 minutes, obvious patterned responses, or missing data over 10%.

2.1.3. Study design

In accordance with the sample size principle for mediating models (at least 10 times the number of variables and no less than 200 cases), plus a 20% allowance for invalid responses, a total of 281 valid samples were included, meeting statistical requirements. 300 questionnaires were distributed, and 281 valid ones were recovered, with an effective response rate of 93.67%.

2.2. Research methods

This online questionnaire survey was carried out in a Grade A tertiary hospital in Foshan with approval and coordination from the nursing administration department and ward head nurses. Anonymous electronic questionnaires were created via Wenjuanxing, with informed consent statements displayed on the front page. Head nurses distributed the questionnaires to eligible nurses for voluntary completion. The system restricted each WeChat account to submit only one response. Questionnaires with overly short completion time or patterned random answers were eliminated. 300 copies were sent out, and 281 valid questionnaires were retrieved, with an effective recovery rate of 93.67%.

2.3. Research instruments

2.3.1. General information questionnaire

Compiled by researchers after a systematic literature review and tailored to the research objectives. It covers demographic and work-related indicators including age, gender, highest education, marital status, department type, working years, professional title, average weekly working hours, night shift frequency, and experience of major organizational changes.

2.3.2. Change fatigue scale (CFS)

The Change Fatigue Scale, originally developed by Bernerth et al., was translated and revised by Zhang Xinyue et al. for evaluating nurses' change fatigue ^[2]. The scale contains 6 items scored on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), with total scores ranging from 16 to 80; higher scores indicate more severe change fatigue ^[3]. The original scale's Cronbach's α coefficient was 0.950, and the Cronbach's α in this study was 0.966, indicating good reliability.

2.3.3. Maslach burnout inventory (MBI)

The Maslach Burnout Inventory compiled by Maslach et al. was used to measure nurses' job burnout ^[4]. It includes 22 items divided into three dimensions: emotional exhaustion, depersonalization, and reduced personal accomplishment. Only the emotional exhaustion subscale was adopted in this study. All items adopt a 7-point frequency scoring standard (0 = never, 6 = every day) with no reverse items. Higher scores of emotional exhaustion and depersonalization represent more severe burnout, while lower personal accomplishment scores indicate higher burnout levels ^[5].

(1) Judgment criteria

Emotional exhaustion ≥ 27 , depersonalization ≥ 8 , reduced personal accomplishment ≤ 24 . Burnout severity is classified as mild (1 dimension exceeding threshold), moderate (2 dimensions), and severe (3 dimensions). The Cronbach's α coefficient of the scale in this study was 0.844.

2.3.4. Nursing workplace satisfaction questionnaire (NWSQ)

The Nursing Workplace Satisfaction Questionnaire developed by Greg Fairbrother and modified by Zhou Lijuan was used to assess nurses' job satisfaction ^[6]. It consists of 16 items covering intrinsic satisfaction, extrinsic satisfaction, and interpersonal satisfaction ^[7]. A 5-point Likert scale was applied (1 = strongly disagree, 5 = strongly agree), with total scores ranging from 16 to 80; higher scores stand for greater job satisfaction. The original scale's Cronbach's α was 0.950, and the value in this study reached 0.966, showing satisfactory reliability.

2.3.5. Turnover intention scale

The turnover intention scale was originally compiled by Michaels, translated and revised by Li Jingyuan, containing 6 items across three dimensions: possibility of resigning, motivation to seek other jobs, and likelihood of obtaining external employment offers. Each item is scored from 1 (never) to 4 (frequently), with total scores between 6 and 24. The Cronbach's α coefficient of this scale in the present study was 0.913.

2.4. Statistical analysis

SPSS 27.0 software was used for data analysis. Descriptive statistics and Pearson correlation analysis were conducted for all variables. The PROCESS macro Model 6 developed by Hayes was employed to construct the chain mediating model, and the Bootstrap method (5,000 repeated samplings) was utilized to estimate mediating effects with 95% confidence intervals (CIs). A mediating effect was deemed statistically significant if the 95% CI did not contain zero ^[8].

3. Results

3.1. General demographic characteristics of participants

A total of 281 clinical nurses were enrolled, including 257 females (91.46%). The dominant age group was 20–29 years old (112 cases, 39.86%). 166 nurses were unmarried (59.07%), 224 held bachelor's degrees (79.72%), and 93 had worked for 1–5 years (33.10%). 258 were frontline clinical nurses (91.81%). Departments were mainly internal medicine (70, 24.91%) and surgery (66, 23.49%). 213 nurses (75.80%) worked night shifts, among whom 127 took 1–3 nights shift per month (45.20%). In addition, 204 nurses (72.60%) had experienced organizational changes.

3.2. Scores of change fatigue, emotional exhaustion, job satisfaction and turnover intention

The average total scores were as follows: change fatigue (16.31 ± 4.07), emotional exhaustion (24.05 ± 13.63), job satisfaction (59.86 ± 10.42), turnover intention (12.40 ± 4.38).

Univariate analysis revealed statistically significant differences in turnover intention scores across different departments and night shift frequencies ($p < 0.05$). Nurses in internal medicine reported higher turnover intention; turnover intention rose with increased night shift frequency ($p < 0.05$) ^[9]. No significant differences in turnover intention were found in terms of age, marital status, education, working years, position, or experience of organizational change ($p > 0.05$).

3.3. Correlation analysis of four variables

Pearson correlation analysis showed that nurses' turnover intention was positively correlated with change fatigue ($r = 0.429$, $p < 0.001$) and emotional exhaustion ($r = 0.523$, $p < 0.001$), and negatively correlated with job satisfaction ($r = -0.429$, $p < 0.001$).

3.4. Multiple linear regression of turnover intention

Taking turnover intention as the dependent variable, variables with statistical significance in univariate analysis (department, night shift frequency) plus change fatigue, emotional exhaustion, and job satisfaction were entered as independent variables into regression.

Results indicated that change fatigue, emotional exhaustion, and job satisfaction were significant predictors of turnover intention ($p < 0.05$). Change fatigue and emotional exhaustion positively predicted turnover intention, while job satisfaction exerted a negative predictive effect. The model explained 32.0% of the variance in turnover intention.

3.5. Chain mediating effects of emotional exhaustion and job satisfaction

PROCESS Model 6 in SPSS 27.0 with 5,000 Bootstrap resamples was used, setting change fatigue as the independent variable, turnover intention as the dependent variable, and emotional exhaustion & job satisfaction as chain mediators.

The total effect of change fatigue on turnover intention was 0.463 (95%CI: 0.348–0.577), and the direct effect was 0.181 (95%CI: 0.052–0.311). Neither CI contained zero, demonstrating a significant direct effect^[10]. The total indirect effect was 0.282 (95%CI: 0.193–0.383), accounting for 60.86% of the total effect, which confirmed significant partial mediating roles of emotional exhaustion and job satisfaction between change fatigue and turnover intention.

4. Discussion

4.1. Current status of nurses' turnover intention

The overall turnover intention score of participants was 12.40 ± 4.38 , with an average item score of 2.07 ± 0.73 , at a medium-low level, lower than the result of Liu Xin et al. (13.93 ± 4.21) from a survey of 63,947 nurses. Among the three dimensions, the possibility of seeking external jobs scored highest while the direct intention to resign scored lowest, consistent with previous research. This suggests that although nurses occasionally consider leaving, their overall turnover tendency is mild, attributable to sound local economic conditions, competitive salaries, and standardized hospital management^[11].

Univariate analysis proved that department and night shift frequency affect turnover intention ($p < 0.05$): nurses in internal and surgery wards bear heavier workload and patient pressure with higher turnover intention, whereas outpatient and operating room nurses with steady work have lower willingness to quit. Frequent night shifts disrupt circadian rhythms and aggravate physical and mental burden. It is recommended to optimize staffing and scheduling, with focused psychological support for nurses in high-pressure departments and those with frequent night shifts to stabilize the workforce.

4.2. Correlations among change fatigue, emotional exhaustion, job satisfaction and turnover intention

Consistent with existing literature, change fatigue and emotional exhaustion were significantly positively correlated with turnover intention, while job satisfaction was significantly negatively correlated with turnover intention ($p < 0.01$). Higher change fatigue and emotional exhaustion correspond to stronger turnover willingness. Pressure brought by constant institutional adjustment and continuous depletion of emotional resources pushes nurses to consider resignation, which aligns with the conservation of resources theory. Regression analysis verified all three factors as critical predictors, with emotional exhaustion having the strongest influence. Managers should pay close attention to nurses' physical and mental burden during institutional reforms and relieve negative emotions to improve job retention.

4.3. Chain mediating path of emotional exhaustion and job satisfaction

This study verified that emotional exhaustion and job satisfaction partially mediate the relationship between change fatigue and nurses' turnover intention, with total indirect effect accounting for 60.86%. Change fatigue can predict turnover intention both directly and via two indirect pathways^[12].

Based on the job demands-resources model, frequent hospital reforms force nurses to constantly adapt to new regulations while lacking sufficient organizational support, resulting in change fatigue and consumption of emotional resources, which leads to emotional exhaustion. On one hand, emotional exhaustion reduces professional identity and work engagement and raises turnover thoughts; on the other hand, reform-related stress lowers job satisfaction and further intensifies turnover intention. The indirect effect of change fatigue via emotional exhaustion reaches 44.11%, and the complete chain path "change fatigue → emotional exhaustion → job satisfaction → turnover intention" is validated^[13–15].

Suggestions for hospital administrators during organizational reforms: optimize workflows, strengthen pre-reform communication and training to reduce change fatigue; establish systematic psychological counseling services to ease emotional exhaustion; improve working conditions, salary and promotion mechanisms to enhance job satisfaction, so as to comprehensively reduce turnover intention and realize long-term stable nursing teams.

5. Conclusion

Three limitations exist in this research:

- (1) Cross-sectional design can only identify correlations rather than causal relationships;
- (2) Samples were collected from a single Grade A tertiary hospital in Foshan, limiting the generalizability of conclusions;
- (3) All data rely on self-reported questionnaires susceptible to subjective bias. Longitudinal tracking, expanded multi-center sampling, and a combination of objective indicators are recommended for follow-up research.

In conclusion, change fatigue can elevate clinical nurses' turnover intention through the chain mediating roles of emotional exhaustion and job satisfaction. During hospital organizational reforms, administrators need to focus on nurses' psychological state, reduce work pressure, alleviate emotional burnout, and enhance a professional sense of gain to stabilize nursing human resources.

Disclosure statement

The authors declare no conflict of interest.

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