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Posted Date: 6 August 2025

doi: 10.20944/preprints202508.0370.v1

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Article

Job Satisfaction, Quality of Life, and Turnover Intention Among Nurses: A Comparative Study of Pattern-Based and Rotating Shift Schedules

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Abstract

Background and Objectives: Shift work among nurses is associated with adverse outcomes, such as low job satisfaction, poor quality of life, and high turnover intention. A pattern-based shift system was recently introduced to address these issues and provide more predictable and regular schedules. This study compared the job satisfaction, quality of life, and turnover intention between nurses working under a pattern-based shift system and those following a traditional rotating shift schedule. **Methods:** A cross-sectional study was conducted with 122 nurses: 61 working rotating shifts and 61 following a pattern-based system. Data were collected between April 17 and 28, 2023, and analyzed using t-tests and one-way ANOVA. **Results:** Nurses under the pattern-based shift system reported significantly higher job satisfaction and quality of life than those on traditional rotating shifts. However, turnover intention did not differ significantly between the two groups. **Conclusions:** The pattern-based shift system enhances job satisfaction and quality of life by providing predictable schedules. Although a significant effect on turnover intention was observed, these findings suggest that increased schedule predictability may improve work environments. Further longitudinal research is warranted to explore long-term effects and related organizational factors.

Keywords: shift nurses; pattern-based work nurses; job satisfaction; quality of life; turnover intention

1. Introduction

Nurses play an essential role as core personnel in medical services and take responsibility for the health and safety of patients. However, owing to the 24-hour operation of hospitals, nurses cannot avoid shift work, which can negatively impact their physical and mental health [1,2]. In particular, irregular shift work and night work disrupt biological rhythms and cause problems such as lack of sleep, accumulated fatigue, and increased stress, which lower job satisfaction [3–5]. According to previous studies, nurses who work in shifts experience relatively high levels of fatigue and emotional exhaustion, reducing work efficiency and affecting the quality of medical services [6,7]. Moreover, this work style hinders the work-life balance of nurses and makes it challenging to balance personal and work lives [8]. Consequently, nurses' job satisfaction decreases, and they tend to consider changing jobs in the long term [9–11]. Research on alternative work styles is required, considering the negative impact of shiftwork on nurses' health and job performance.

A new work system called the "pattern-based work system" has been proposed to improve the problem of shift work [12]. The pattern-based work system regularly allocates work days centered on night work, allowing for predictable days off and work [12]. Unlike the existing shiftwork system, where shifts are not fixed and nurses rotate individually [11], the pattern-based work system aims to improve the balance between work and personal life by designing more predictable work schedules

for nurses. The pattern-based work system was designed to maintain consistent work patterns and help nurses plan their personal lives more effectively. Accordingly, the work-life balance of nurses is improved, which is likely to lead to increased job satisfaction and improved quality of life. Furthermore, nurses who work shifts are more likely to consider changing jobs because of irregular schedules and high work intensity [13]. However, nurses subject to the pattern-based work system will likely have lower intentions to change jobs because they can maintain a more stable work life based on a consistent work schedule [12].

Making nurses' work patterns regular and differentiated from existing irregular shiftwork is expected to improve nurses' health and job sustainability positively. However, appropriate nurse staffing is necessary to implement a pattern-based work system. The cost burden on hospitals may increase owing to an increase in the number of nursing staff. In addition, from the nurses' perspective, there may be a decrease in individual nurses' allowances owing to a decline in the number of working days and use of vacations [11]. However, studies that empirically verify this hypothesis are limited. In particular, no studies analyze the effects of pattern-based work systems in Korea. Therefore, it is essential to evaluate the effectiveness of a pattern-based work system and empirically analyze its impact on nurses' job satisfaction, quality of life, and intention to change jobs to derive evidence-based policy suggestions for improving nurses' working environment.

This study empirically analyzed the effects of a pattern-based work system and examined the usefulness of alternative work systems. In particular, it comprehensively analyzes the impact of work patterns on nurses by considering the negative outcome variables of shiftwork, such as job satisfaction, quality of life, and intention to change jobs. This study is expected to improve the efficiency of nursing workforce management and create a more sustainable work environment by clearly identifying the differences between shift work and pattern-based work systems. Additionally, the results of this study can be used as data for evidence-based decision-making by hospital managers and policymakers, ultimately contributing to improving nurses' job satisfaction and reducing turnover rates.

2. Materials and Methods

2.1. Design and Participants

This descriptive research study recruited nurses working in shifts or pattern shifts for more than 6 months at general hospitals in Korea. The number of participants was derived from 102 individuals (51 in each group) using the G*Power 3.1.9 program, with a power of .80, a medium effect size of .5, and a significance level of .05 for the difference between two independent means test. Based on this, a questionnaire was distributed to 61 individuals in each group (122), considering a dropout rate of 20%. Further, 10 individuals with insufficient responses were excluded from the study, and 56 individuals in each group, 112 copies, were included in the final analysis.

2.2. Instruments

2.2.1. General Characteristics

The participants' general characteristics included age, sex, marital status, religion, highest level of education, working unit, work experience, and average monthly salary.

2.2.2. Job Satisfaction

Job satisfaction was measured using the Job Satisfaction Scale for Clinical Nurses (JSS-CN) developed by Lee et al. [14]. This tool comprises 33 items: nine items on organizational recognition and professional achievement, six items on human maturity through the nursing profession, eight items on interpersonal relationships of respect and recognition, four items on fulfilling responsibilities as a nurse, three items on demonstrating professional competence, and three items on job stability and rewards. It uses a five-point Likert scale ranging from 1 (not at all) to 5 (very

much), with a higher score indicating higher job satisfaction. The reliability of this tool was Cronbach's $\alpha=.95$ in Lee et al. [14], and the overall reliability in this study was Cronbach's $\alpha=.96$.

2.2.3. Quality of Life

Quality of life was measured using the tool of Pack [15], which is a revised and supplemented version of the Scale for Korean Adults' Quality of Life (SKAQOL) by Yu [16] and Ro [17]. It comprises seven items on work life, five items on self-esteem, six on emotional state, five on leisure activities, three on family relationships, and two on physical condition, for 28 items. It is scored on a five-point Likert scale ranging from 1 to 5 points, with a higher score indicating a higher quality of life. The reliability of this tool was Cronbach's $\alpha = .89$ in the study by Pack [15] and Cronbach's $\alpha = .90$ in the present study.

2.2.4. Turnover Intentions

Turnover intention was measured using the Turnover Intention Measurement Tool, developed by Yun et al. [18]. This tool comprises 10 items in three sub-areas: four on job satisfaction factors, three on work performance, and three on interpersonal relationships. The score was on a five-point Likert scale ranging from 1 point (not at all) to 5 points (very much), with a higher score indicating a higher turnover intention. The reliability of this tool was Cronbach's $\alpha=.83$ in the study by Yun et al. [18] and Cronbach's $\alpha=.86$ in the present study.

2.3. Data Analysis

The collected data were analyzed using SPSS Windows software version 28.0. The general characteristics of shiftwork nurses and pattern-based-work nurses were analyzed using frequency and descriptive statistical analyses, and the differences between groups were obtained using the chi-square test and independent sample t-test. Job satisfaction, quality of life, and intention to change jobs between shift and pattern shift workers were analyzed using independent t-tests. The differences between job satisfaction, quality of life, and intention to change according to the general characteristics of shiftwork nurses and pattern-based work nurses were analyzed using one-way ANOVA, Scheffe's post hoc analysis, and an independent t-test.

2.4. Ethical Consideration

This study was conducted from April 17 to 28, 2023, after receiving approval from the Institute of Research Board (IRB) in C city to protect participants (IRB No. 2022-12-014-003). The questionnaire was distributed by the head nurse of the ward, and completed questionnaires were collected directly by the researcher. The purpose and procedure of this study were explained to the participants in writing, and their consent to participate was obtained. The participants were told that they could withdraw at any time, even if they agreed to participate, and that they could stop participating in the study without any disadvantages. The collected data were sealed in individual envelopes to ensure confidentiality. It was explained that the data from the questionnaire responses would not be used for any purpose other than research and would be destroyed after a statutory retention period of three years.

3. Results

3.1. General Characteristics

There were no significant group differences across participants regarding their general characteristics (Table 1).

Table 1. Differences in general characteristics between the two groups (N=112).

Characteristics	Categories	shift work (n=56)	pattern work (n=56)	χ^2/t	p^{\dagger}
		n(%)	n(%)		
Age (yr)	≤24	9(16.1)	10(17.9)	1.12	.572
	25–29	29(51.8)	33(58.9)		
	≥30	18(32.1)	13(23.2)		
	M±SD	29.66±6.25	28.77±6.56	0.74	.462
Sex	M	1(1.8)	2(3.6)	0.35	1.00
	F	55(98.2)	54(96.4)		
Marital status	Single	45(80.4)	42(75.0)	0.21	.650
	Married	11(19.6)	14(25.0)		
Religion	Yes	11(19.6)	12(21.4)	0.00	1.00
	No	45(80.4)	44(78.6)		
Education	College	5(10.7)	3(5.4)	1.33	.617
	University	46(82.1)	50(89.3)		
	Graduate	4(7.2)	3(5.4)		
Working unit	General ward	21(37.5)	27(48.2)	0.91	.340
	special department	35(62.5)	29(51.8)		
Work experience (yr)	<2	14(25.0)	18(32.2)	1.43	.539
	2<5	17(30.4)	19(33.9)		
	≥5	25(44.6)	19(33.9)		
	M±SD	6.09±6.09	5.70±6.77	0.33	.745
Salary level	<2.5 million won	10(17.9)	8(14.3)	0.62	.769
	2.5 –3.5 million won	42(75.0)	42(75.0)		
	≥3.5 million won	4(7.1)	6(10.7)		

\dagger : Fisher’s exact test.

3.2. Differences in Job Satisfaction, Quality of Life, and Turnover Intention

Table 2 presents the differences in job satisfaction, quality of life, and turnover intention of nurses with shift and pattern work systems. Significant differences were found between the two groups in job satisfaction and quality of life. There were no significant differences in turnover intention between the groups.

Table 2. Differences in job satisfaction, quality of life, and turnover intention between the two groups (N=112).

variable	shift work (n=56)	pattern work (n=56)	t	p^{\dagger}
	M±SD	M±SD		
Job satisfaction	3.33±0.54	3.63±0.39	-3.85	<.001
Quality of life	2.86±0.46	3.20±0.42	-3.88	<.001
Turnover intention	3.94±0.57	3.75±0.64	-1.52	.129

\dagger : t-test, Mann-Whitney U test.

3.3. Differences in Job Satisfaction by General Characteristics

In shift work, job satisfaction was significantly higher in “married” than in “single” in marital status ($t=2.62$, $p=.011$). Further, there was a significant difference in education level ($F=5.20$, $p=.009$) and the results of the post-test showed that it was higher in “graduate school graduate” than in “university graduate.” Additionally, job satisfaction was significantly higher in the “general ward” than in the “special department” ($t=2.53$, $p=.013$), and there was a significant difference in salary levels ($F=8.49$, $p=.001$; Table 3).

Conversely, job satisfaction of pattern-type nurses showed a significant difference only by length of service ($F=4.76$, $p=.013$), and job satisfaction was higher in nurses with “5 years or more” than “less than 2 years” of service (Table 3).

Table 3. Differences in job satisfaction by general characteristics (N=112).

Characteristics	Categories	shift work (n=56)			pattern work (n=56)		
		Mean±SD	F/t	<i>p</i> (Scheffe)	Mean±SD	F/t	<i>p</i> (Scheffe)
Age (yr)	≤24	3.21±0.45			3.47±0.40		
	25–29	3.23±0.49	2.17	.124	3.61±0.40	2.48	.094
	≥30	3.54±0.62			3.83±0.32		
Sex	M	2.48±0.00	-1.58	.119	3.67±0.81	0.12	.903
	F	3.34±0.54			3.63±0.38		
Marital status	Single	3.24±0.49	-2.62	.011	3.57±0.40	-2.00	.050
	Married	3.69±0.62			3.81±0.32		
Religion	Yes	3.40±0.52	0.52	.607	3.66±0.38	-0.26	.798
	No	3.31±0.55			3.63±0.40		
Education	College ^a	3.56±0.64	5.20	.009 (b<c)	3.75±0.05	0.37	.696
	University ^b	3.23±0.48			3.63±0.39		
	Graduate ^c	4.02±0.58			3.78±0.63		
Working unit	General ward	3.56±0.54	2.58	.013	3.71±0.32	1.36	.181
	special department	3.19±0.50			3.57±0.44		
Work experience (yr)	<2 ^a	3.35±0.59	0.08	.923	3.43±0.48	4.76	.013 (a<c)
	2<5 ^b	3.28±0.53			3.66±0.31		
	≥5 ^c	3.34±0.55			3.80±0.29		
Salary level	<2.5 million won ^a	3.03±0.55	8.49	.001 (a,b<c)	3.54±0.45	2.49	.093
	2.5–3.5 million won ^b	3.31±0.45			3.60±0.39		
	≥3.5 million won ^c	4.20±0.61			3.95±0.19		

3.4. Differences in Quality of Life by General Characteristics

In shift work, quality of life significantly differed according to educational level (F=4.59, p=.015). Further, the post-hoc test results showed that it was higher among “graduate school graduates” than “university graduates.” Quality of life showed a significant difference by salary level (F=9.43, p<.001), and the post-hoc test results showed that it was higher in “over 3.5 million won” than in “under 3.5 million won” (Table 4).

In the pattern-based work type, quality of life was significantly higher in “married” than “single” in marital status (t=2.16, p=.036). Moreover, there was a significant difference by salary level (F=3.79, p=.029), and the post-hoc test results showed that it was higher in “over 3.5 million won” than in “under 2.5 million won.”

Table 4. Differences in quality of life by general characteristics (N=112).

Characteristics	Categories	shift work (n=56)			pattern work (n=56)		
		Mean±SD	F/t	<i>p</i> (Scheffe)	Mean±SD	F/t	<i>p</i> (Scheffe)
Age (yr)	≤24	2.83±0.28			3.20±0.56		
	25–29	2.75±0.46	2.38	.101	3.12±0.34	1.94	.173
	≥30	3.05±0.50			3.40±0.47		
Sex	M	3.21±0.00	0.76	.448	3.30±0.68	0.35	.726
	F	2.86±0.47			3.20±0.42		
Marital status	Single	2.80±0.40	-1.98	.053	3.13±0.40	-2.16	.036
	Married	3.10±0.62			3.40±0.44		
Religion	Yes	2.71±0.47	-1.18	.244	3.09±0.37	-1.00	.324
	No	2.90±0.46			3.23±0.43		
Education	College ^a	3.08±0.40	4.59	.015 (b<c)	3.11±0.29	0.79	.459
	University ^b	2.79±0.42			3.19±0.43		
	Graduate ^c	3.41±0.69			3.49±0.46		

Working unit	General ward	2.97±0.49	1.33	.188	3.13±0.43	-1.18	.243
	special department	2.80±0.44					
Work experience (yr)	<2 ^a	2.87±0.44	0.15	.864	3.22±0.48	2.10	.133
	2<5 ^b	2.81±0.46					
	≥5 ^c	2.89±0.50					
Salary level	<2.5 million won ^a	2.66±0.36	9.43	<.001 (a,b<c)	2.96±0.47	3.79	.029 (a<c)
	2.5–3.5 million won ^b	2.83±0.42					
	≥3.5 million won ^c	3.68±0.38					

3.5. Differences in Turnover Intention by General Characteristics

There were no significant differences in turnover intention according to general characteristics in either group according to general characteristics (Table 5).

Table 5. Differences in turnover intention by general characteristics (N=112).

Characteristics	Categories	shift work (n=56)			pattern work (n=56)		
		Mean±SD	F/t	p (Scheffe)	Mean±SD	F/t	p (Scheffe)
Age (yr)	≤24	3.84±0.29	0.17	.841	3.50±0.93	3.12	.068
	25–29	3.94±0.68			3.92±0.53		
	≥30	3.98±0.49			3.51±0.54		
Sex	M	3.50±0.00	0.77	.442	3.70±0.57	-0.11	.915
	F	3.95±0.57			3.75±0.65		
Marital status	Single	3.91±0.62	0.70	.487	3.82±0.65	1.55	.127
	Married	4.05±0.31			3.53±0.56		
Religion	Yes	3.95±0.38	0.11	.913	3.75±0.62	0.01	.991
	No	3.93±0.61			3.75±0.65		
Education	College ^a	3.98±0.53	0.27	.768	3.93±0.67	1.27	.290
	University ^b	3.92±0.60			3.77±0.63		
	Graduate ^c	4.13±0.30			3.20±0.72		
Working unit	General ward	4.08±0.31	1.69	.159	3.88±0.64	1.48	.145
	special department	3.85±0.67			3.63±0.62		
Work experience (yr)	<2 ^a	3.85±0.28	0.62	.541	3.68±0.68	0.42	.658
	2<5 ^b	3.87±0.73			3.86±0.66		
	≥5 ^c	4.03±0.57			3.71±0.60		
Salary level	<2.5 million won ^a	3.97±0.51	0.06	.940	3.85±0.26	0.51	.614
	2.5–3.5 million won ^b	3.94±0.53			3.75±0.68		
	≥3.5 million won ^c	3.85±1.14			3.57±0.74		

4. Discussion

This study used differences in job satisfaction, quality of life, and turnover intention between shift and pattern-shift workers as basic data to establish an efficient work style for clinical nurses. In this study, nurses subjected to a pattern-based work system showed significantly higher job satisfaction than those in shifts. This is similar to the results of a previous study, in which nurses who worked regular two-shift work had higher job satisfaction than those who worked irregular three-shift work [19]. In this study, the ability to take long-term vacations, even when working long hours, increased nurses’ autonomy, which positively affected job satisfaction. This context is consistent with the characteristics of a pattern-based work system that guarantees regular weekly holidays and allows for predictable holidays. Specifically, the predictability of work schedules and the possibility of planning one’s personal life can significantly increase nurses’ job satisfaction. It has been reported that nurses’ job satisfaction is affected more by the predictability and consistency of work patterns than by the length of working hours and that random or frequent schedule changes are significant causes of increased stress, burnout, and dissatisfaction [20]. In future studies, it will be necessary to identify more specifically the influence of the predictability of work schedules on job satisfaction.

This study showed that nurses with a pattern-based work schedule had a significantly higher quality of life than those with a shift work schedule. This is interpreted as a result of the regularity and predictability of work schedules, which positively affect nurses' daily routine adjustments and leisure time. Bang et al. [21] also showed that nurses who regularly worked night shifts perceived their personal lives more positively than a typical three-shift nurse, which is in line with the results of this study. Furthermore, recent studies [22,23] reported that nurses in a shiftwork system experienced lower life satisfaction, impaired family and social relationships, and less leisure time than nurses in a day shift work schedule. In this context, the pattern-based work system shows potential as a work-system approach for maintaining and improving nurses' quality of life. In the future, it will be necessary to examine the actual effects and applicability of the pattern-based work system more clearly through follow-up studies considering various work environments and hospital sizes.

Meanwhile, there was no significant difference in turnover intention between nurses' working patterns and those working shifts. A recent prospective longitudinal study confirmed that sleep disturbance, fatigue, depression, and job stress caused by shift work significantly affected not only turnover intention but also actual turnover, resulting from a follow-up survey targeting nurses on shift work [24]. Additionally, nurses working shifts showed high turnover intention and decreased sleep efficiency [1], and it was found that working night shifts significantly affected turnover intention. Notably, in this study, the pattern-based work system positively affected job satisfaction and quality of life, but there was no significant difference in turnover intention. Specifically, even if the pattern-based work system provides some predictability, it is still shift work, including night work. Thus, it cannot wholly escape problems unique to shift work, such as physical and mental fatigue accumulation and social relationship isolation. Therefore, the results of this study suggest that although the pattern-based work system can contribute to improving quality of life and job satisfaction, an integrated strategy that includes alleviating sleep disorders, reducing fatigue, and strengthening psychosocial support within the organization is necessary to minimize shiftwork nurses' turnover intention.

Comparing the job satisfaction of the two groups according to general characteristics, the job satisfaction of shift nurses showed significant differences according to marital status, education level, working unit, and salary level. In contrast, the pattern-based work nurse group showed differences only according to work experience. These results show that the job satisfaction of the shift nurses is affected by various personal and work environment factors [25–27]. In contrast, the pattern-based work system can partially alleviate these factors' influence through the schedule's regularity and predictability. In particular, a pattern-based work system can positively affect job satisfaction as work experience accumulates, adaptation to the schedule, and positive experiences with the system. Conversely, in the case of the shift nurses, owing to the irregular schedule and unpredictable work environment, external factors such as marital status, education level, and department characteristics are likely to have a more sensitive effect on job satisfaction. This indicates that a pattern-based work system can be an institutional alternative that stabilizes the work environment of nurses.

When comparing quality of life by general characteristics, both groups showed significant differences according to salary level, which is consistent with previous studies reporting that salary level positively affects nurses' job satisfaction and quality of life [28,29]. Additionally, in the group of nurses under the pattern-based work system, the quality of life of 'unmarried' nurses was found to be higher than that of "married" nurses, which is interpreted as being because "unmarried" nurses have less of a burden at home, such as family care or child-rearing [30]. Thus, they have greater autonomy in their non-working hours. Specifically, a pattern-based work system is expected to have a relatively positive effect on improving the quality of life of unmarried nurses.

Finally, no general characteristics showed significant differences in turnover intentions between the groups. These results are consistent with previous studies reporting that turnover intention is more influenced by structural factors such as work environment, organizational culture, job stress, and the burden of nursing work than individual sociodemographic characteristics [31,32].

Specifically, it can be thought that turnover intention is closely related to overall working conditions, such as long working hours, fatigue, insufficient human resource support, and a low level of organizational support, rather than simply individual characteristics. Therefore, to lower the turnover rate, improvements in the work environment and practical support strategies at the organizational level should be prioritized over individual traits.

This study is significant because it identified nurses' job satisfaction, quality of life, and turnover intentions in predictable pattern-based work systems and compared them with those of traditional shift nurses. Thereby confirming the effects of pattern-based work systems and providing basic data for expanding pattern-based work systems. However, the fact that the pattern-based work system was in the pilot stage may have affected the results. Nurses' expectations or uncertainties about the work environment were possibly reflected in situations in which the system was not fully established. Therefore, long-term follow-up studies that consider variables such as the adaptation period to the pattern-based work system, operational stability, and awareness of the system are necessary.

5. Conclusions

In conclusion, this study confirmed that pattern-based nurses did not show a significant difference in turnover intention compared to traditional shift nurses, but were more positively affected in job satisfaction and quality of life. This suggests that the regularity and predictability of work schedules can positively affect nurses' job satisfaction and overall life. Further, these can be used as evidence to support the need for improving work styles to maintain nursing staff and improve satisfaction within the organization in the future.

Author Contributions: Conceptualization, Y.J.J; methodology, Y.J.J and H.J.K; formal analysis, Y.J.J; investigation, Y.J.J; writing—original draft preparation, Y.J.J; writing—review and editing, H.J.K; supervision, H.J.K. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Review Board of Samsung Changwon Hospital (IRB No. 2022-12-014-003, date of approval: 11 Jan 2023).

Informed Consent Statement: Informed consent was obtained from all participants involved in the study.

Data Availability Statement: Data available upon written request to the corresponding author.

Acknowledgments: The authors would like to thank all the participants for participating in this study.

Conflicts of Interest: The authors declare no conflicts of interest.

References

1. Shin, S.H.; Kim, S.H. Influence of health-promoting behaviors on quality of sleep in rotating-shift nurses. *Korean Acad Fundam Nurs* **2014**, *21*, 123–130. DOI:10.7739/jkafn.2014.21.2.123.
2. Ferri, P.; Guadi, M.; Marcheselli, L.; Balduzzi, S.; Magnani, D.; Di Lorenzo, R. The impact of shift work on the psychological and physical health of nurses in a general hospital: A comparison between rotating night shifts and day shifts. *Risk Manag Healthc Policy* **2016**, *9*, 203–211. DOI:10.2147/RMHP.S115326.
3. Aemmi, S.Z.; Mohammadi, E.; Fereidooni-Moghadam, M.; Zarea, K.; Boostani, H. Sleep management experiences of shift-working nurses: A grounded theory study. *Collegian* **2022**, *29*, 493–499. DOI:10.1016/j.colegn.2021.11.005.
4. Mober, S.M.A.; Mohemmed, M.A.; Khriji, R.M.A.; Dabaa, H.Y.M.; Zayed, T.H.A.; Tayeb, H.J.T.; Bajaanfer, N.H.H.; Kariri, F.N.A. The Impact of Shift Work on Nurses' well-being and Patient Care Excellence in Inpatient Settings. *BjNS* **2024**, *4*, 95–105. DOI:10.32996/bjns.2024.4.2.11.
5. Min, A.; Hong, H.C.; Son, S.; Lee, T. Sleep, fatigue and alertness during working hours among rotating-shift nurses in Korea: An observational study. *J Nurs Manag* **2021**, *29*, 2647–2657. DOI:10.1111/jonm.13446.
6. Booker, L.A.; Barnes, M.; Alvaro, P.; Collins, A.; Chai-Coetzer, C.L.; McMahon, M.; Lockley, S.W.; Rajaratnam, S.M.W.; Howard, M.E.; Sletten, T.L.; Rajaratnam, S.M.W.; Howard, M.E.; Sletten, T.L. The role

- of sleep hygiene in the risk of Shift Work Disorder in nurses. *Sleep* **2020**, *43*, zsz228. DOI:10.1093/sleep/zsz228.
7. Cho, H.; Steege, L.M. Nurse fatigue and nurse, patient safety, and organizational outcomes: A systematic review. *West J Nurs Res* **2021**, *43*, 1157–1168. DOI:10.1177/0193945921990892.
 8. Oh, H.K.; Cho, S.H. Effects of nurses' shiftwork characteristics and aspects of private life on work-life conflict. *PLOS One* **2020**, *15*, e0242379. DOI:10.1371/journal.pone.0242379.
 9. Gautam, P.K.; Gautam, D.K.; Bhetuwal, R. Work-life balance, job satisfaction and turnover intentions among nurses. *Int J Organ Anal* **2025**, *33*, 538–557. DOI:10.1108/IJOA-09-2023-4002.
 10. Chen, I.H.; Brown, R.; Bowers, B.J.; Chang, W.Y. Work-to-family conflict as a mediator of the relationship between job satisfaction and turnover intention. *J Adv Nurs* **2015**, *71*, 2350–2363. DOI:10.1111/jan.12706.
 11. Kim, J.H.; Bae, H.J.; Kwon, H.J. Current Status and Direction of Reform of Nursing Staff Rotation System [Research series], 2019; Vol. 14.
 12. Park, K.; An, J.; Han, N.K. A predictable pattern shift schedule model for improving nurses' shift work. *Health Soc Welf Rev* **2022**, *42*, 258–276.
 13. Hong, J.; Kim, M.; Suh, E.E.; Cho, S.; Jang, S. Comparison of fatigue, quality of life, turnover intention, and safety incident frequency between 2-shift and 3-shift Korean nurses. *Int J Environ Res Public Health* **2021**, *18*, 7953. DOI:10.3390/ijerph18157953.
 14. Lee, B.S.; Eo, Y.S.; Lee, M.A. Development of job satisfaction scale for clinical nurses. *J Korean Acad Nurs* **2018**, *48*, 12–25. DOI:10.4040/jkan.2018.48.1.12.
 15. Park, Y.M. Interrelation of Living Habits and Living Quality of Shift Nurses [Master's Thesis]; Kyonggi University, 2005.
 16. Yu, H.J. Development of the Scale for Korean Adult's Quality of Life and Comparative Study of Various Scio-Demo Graphic Groups. PhD [Dissertation]; Inha University, 2004.
 17. Ro, Y.J. Analysis of the Quality of Life of Middle-Aged Adults in Seoul. PhD [Dissertation]; Yeonsei University, 1988.
 18. Yeun, E.J.; Kim, H. Development and testing of a nurse turnover intention scale (NTIS). *J Korean Acad Nurs* **2013**, *43*, 256–266. DOI:10.4040/jkan.2013.43.2.256.
 19. Shin, Y.H.; Choi, E.Y.; Kim, E.H.; Im, Y.S.; Seo, S.S.; Kim, K.S.; Kim, Y.J. Comparison of work-life balance, fatigue and work errors between 8-hour shift nurses and 12-hour shift nurses in hospital General Wards. *J Korean Clin Nurs Res* **2018**, *24*, 170–177.
 20. Emmanuel, T.; Griffiths, P.; Lamas-Fernandez, C.; Ejebu, O.Z.; Dall'Ora, C. The important factors nurses consider when choosing shift patterns: A cross-sectional study. *J Clin Nurs* **2024**, *33*, 998–1011. DOI:10.1111/jocn.16974.
 21. Bang, J.A.; Joung, H.S.; Lee, D.H. The impact of fixed shift work of fixed night shift nurses on job engagement and satisfaction. *J Korean Soc Qual Manag* **2024**, *52*, 745–765.
 22. Ljevak, I.; Vasilj, I.; Ćurlin, M.; Šaravanja, N.; Meštrović, T.; Šimić, J.; Neuberger, M. The impact of shift work on psychosocial functioning and quality of life among hospital-employed nurses: A cross-sectional comparative study. *Psychiatr Danub* **2020**, *32*(Suppl 2), 262–268. DOI:10.24869/psyd.2020.262.
 23. Salmond, S.; Weaver, S.H.; Marcus-Aiyeku, U.; Markiewicz, D. Working from dusk to dawn: A joy or nightmare. *Orthop Nurs* **2025**, *44*, 4–19. DOI:10.1097/NOR.0000000000001087
 24. Ki, J.; Choi-Kwon, S. Turnover Intention and Actual Turnover of Shift Work Nurses: Causal Mediation Analysis of Turnover Intention 2021. PhD [Dissertation]; Seoul National University.
 25. Hua, J.; Kondo, A.; Wang, C.; Ganchuluun, S. Job satisfaction, intention to leave, and related factors among foreign-educated nurses in Japan: A cross-sectional study. *J Nurs Manag* **2023**, *2023*, 9686746. DOI:10.1155/2023/9686746.
 26. Zhao, Y.; Lu, H.; Zhu, X.; Xiao, G. Job satisfaction among hospital nurses: An updated literature review. *International Journal of Nursing Studies* **2025**, *162*, 104964. DOI:10.1016/j.ijnurstu.2024.104964
 27. Qassim, B.M.; Alanazi, T.N.; Elaqi, Z.A.A.; Maghawi, S.J.A.; Harshan, S.M.H.; Alshahrani, M.A.M.; Aljadrani, S.H.S.; Alqahtani, F.M.M.; Alsolli, S.A.A.; Alsultan, A.M. Assess nurses' job satisfaction and marital quality. *Int J Med Toxicol Leg Med* **2024**, *27*, 396–401.

28. Sibuea, Z.M.; Sulastiana, M.; Fitriana, E. Factor affecting the quality of work life among nurses: A systematic review. *J Multidiscip Healthc* **2024**, *17*, 491–503. DOI:10.2147/JMDH.S446459.
29. Kim, K.A. Relationship between job satisfaction, and turnover intention and quality of life in small and medium Hospital's nurses. *J Korea Acad-Ind Coop Soc* **2019**, *20*, 678–688.
30. Kim, J.I.; Yeom, J.W.; Park, S.K.; Jeong, H.H.; Min, U.J.; Park, S.H.; Lee, J.M.; Yeom, Y.S. Experience of conflict in three shift nurses rearing more than two kids: Phenomenological study. *Korean J Women Health Nurs* **2018**, *24*, 252–264. DOI:10.4069/kjwhn.2018.24.3.252.
31. Kim, H.; Kim, E.G. A meta-analysis on predictors of turnover intention of hospital nurses in South Korea (2000–2020). *Nurs Open* **2021**, *8*, 2406–2418. DOI:10.1002/nop2.872.
32. Shin, S.H.; Baek, O.J.; Lee, E.H. Effects of nursing work environment, need satisfaction, and depression on turnover intention in Korea. *Healthcare* **2023**, *11*, 1698. DOI:10.3390/healthcare11121698.

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