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Factors associated with
nurses' turnover intention in Mongolia

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Factors associated with nurses' turnover intention in Mongolia

A Master's Thesis

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and the Graduate School of Yonsei University
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ABSTRACT

Factors associated with nurses' turnover intention in Mongolia

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Background: Nurse turnover intention, defined as the likelihood of a nurse leaving their current position, poses a significant challenge for healthcare systems worldwide, including Mongolia. Nurses play a vital role in delivering essential medical services, and maintaining an adequate nursing workforce is crucial for ensuring the quality of healthcare. Despite their critical role, Mongolia's nurse-to-population ratio falls below the minimum recommended by the World Health Organization, highlighting a significant shortage of nursing staff. Factors such as high workload, low wages, social stress, and low job satisfaction contribute to high turnover rates. Turnover intention not only affects patient care but also places financial strain on healthcare facilities due to the ongoing need to recruit and train new staff.

Purpose: This study aimed to identify factors influencing the turnover intentions of nurses in Mongolia, focusing on burnout, job crafting, and the nursing work environment.

Methods: A cross-sectional descriptive study was conducted with nurses from tertiary hospitals in Ulaanbaatar, Mongolia. The sample size.

calculated using G*Power, consisted of 123 nurses recruited from the State Second Central Hospital and Brilliant Hospital. Data collection was performed using a structured survey that included 93 questions covering general characteristics, burnout, job crafting, the nursing work environment, and turnover intention. Statistical analyses were carried out using descriptive statistics, the t-test, one-way ANOVA, Pearson correlation, and multiple regression analysis in the SPSS 25.0 software.

Results: Burnout and the nursing work environment were significantly correlated with turnover intention. Higher levels of burnout and poorer nursing work environments were associated with increased turnover intention. Additionally, job crafting demonstrated a significant positive correlation with the nursing work environment.

Conclusion: This study identified that the nursing work environment and burnout are key factors in reducing the turnover intention among nurses in Mongolia. Therefore, it is necessary to improve staffing levels and resources to enhance the nursing work environment in Mongolia, and interventions aimed at reducing burnout are also required. This emphasizes the need for appropriate interventions to improve the working conditions of Mongolian nurses, ultimately contributing to lower turnover rates and enhancing the stability and quality of the healthcare system.

Key words: nurse, turnover intention, burnout, nursing work environment, job crafting, Mongolia

1. INTRODUCTION

1.1. Background

Nurse turnover intention, which refers to the likelihood of a nurse leaving their current position, poses a significant challenge to healthcare systems worldwide, including in Mongolia (Halter et al., 2017; Kim & Kim, 2021; Dovdon et al., 2022; Peng et al., 2023; Tsogbadrakh et al., 2020). Nurses are professionals who provide essential healthcare services for patient treatment and recovery in hospitals (Wakefield et al., 2021). Therefore, maintaining a sufficient nursing workforce is essential to ensure the quality of healthcare services (Richardson & Storr, 2010; Han et al., 2021; Witczak et al., 2021).

According to international statistics, the nurse-to-population ratio in Mongolia is 4.02 per 1,000, which is below the World Health Organization's recommended minimum of 4.45 nurses per 1,000 population (The World Bank, 2017). Additionally, of the 56,500 healthcare workers in Mongolia, only 13,112 are nurses, despite a demand that exceeds 20,000, highlighting a significant shortfall (Dovdon et al. 2022). In Mongolia, this shortage of nursing staff is attributed to factors that contribute to high turnover rates, including heavy workloads, low wages, high social stress and frustration, numerous obstacles, and low job satisfaction among nurses. Such turnover not only undermines the quality of patient care but also affects the stability of nursing organizations (Zanabazar et al., 2023; Gaalan et al., 2019).

Nurse turnover has been recognized as a significant challenge that not only increases the financial expenditures of healthcare facilities but also adversely affects the quality of patient care (Griffiths et al., 2019; Andel et al., 2022; Pressley et al., 2023; Choi & Shin, 2022). The turnover of skilled nurses requires continuous recruitment and subsequent training of new staff, which places a substantial economic burden on healthcare facilities in terms of human resource allocation and the training expenses needed to replace turnover nurses (Galan et al., 2019; Kalankova et al., 2020; Rich & Anderson, 2021). Therefore, maintaining and developing a well-trained nursing workforce is essential, playing a pivotal role in preserving operational stability and enhancing the quality of medical services delivered (Flaubert et al., 2021).

Numerous prior studies have investigated the factors influencing nurses' turnover intention. Factors such as age, gender, marital status, education level, subjective health status, and sleep disorders have been identified as biopsychosocial factors affecting turnover intention at the individual level (Huang et al., 2024; An et al., 2022; Ma et al., 2022; Wang et al., 2022; Job-related factors including job stress, position, employment type, work department, job satisfaction, burnout, job crafting, salary satisfaction, and sense of belonging have also been reported (Lee & Kim, 2020; Li et al., 2020; Al Zamel et al., 2020; Chen et al., 2024; Jiang et al., 2023; Yang et al., 2017;). Additionally, factors such as resource adequacy, monthly income, department, organizational commitment, organizational culture, and the nursing work environment have been identified as affecting the organizational aspect of nurses' turnover intentions (Jackson et al., 2020; Kim & Moon, 2021; Yoon et al., 2020; Lee, 2022; Varasteh et al., 2022; Kwon & Kim, 2019).

Among the various factors associated with turnover intention, burnout is characterized by emotional, physical, and mental exhaustion resulting from prolonged stress and overwork in the workplace. This condition has been consistently linked to nurse turnover intention, as nurses experiencing burnout are more likely to seek alternative employment or leave the profession altogether (Kelly et al., 2021; Labrague et al., 2017; Guo et al., 2019; Poku et al., 2022; Van der Heijden et al., 2019; Dwinijanti et al., 2020).

Job crafting involves employees proactively modifying their job roles, tasks, and relationships to better align with their preferences, strengths, and needs (Work, 2001; Badran & Akeel, 2020; Chu et al., 2022; Shin et al., 2020; Chung & Han, 2023). This process enables individuals to personalize their work experiences, which leads to increased job satisfaction and engagement (Wrzesniewski & Dutton, 2001). Research has shown that job crafting significantly affects nurse turnover intention. Nurses who engage in job crafting behaviors tend to report higher job satisfaction and exhibit lower turnover intentions (Tims et al., 2013).

The nursing work environment encompasses various aspects including the work situation, the physical environment as perceived by the individual, interpersonal interactions, and organizational policy (Christmas, 2008). It represent a comprehensive setting where working conditions and worker responsibilities are optimized for efficiency. This environment significantly influences not only the performance of nurses but also their retention and the attraction of new nursing personnel (Pressley & Garside, 2023; Smith et al., 2018). Previous research has shown that a positive perception of the nursing work environment correlates with lower turnover intentions (Ma & Dunton, 2015; Kim & Yeo, 2019). Therefore, to reduce turnover intentions

and manage and develop nursing personnel effectively, it is important to enhance the nursing work environment.

Research on the factors influencing nurse turnover rates in Mongolia is sparse. Specifically, there is a lack of studies examining how key concepts such as burnout, the nursing work environment, and job crafting impact the turnover of Mongolian nurses.

This study investigated turnover intention among nurses in Mongolia, where there is a notable shortage of nurses, and examined the effects of burnout, job crafting, and the nursing work environment, which have all been identified as significant factors influencing nurses' turnover intention.

1.2. Purposes

The purpose of this study was to identify factors related to turnover intention among Mongolian nurses. The specific objectives were as follows.

1. To identify the general characteristics of Mongolian nurses and the study variables.
2. To identify differences in turnover intention according to the general characteristics of Mongolian nurses.
3. To identify the relationships among the burnout, job crafting, nursing work environment, and turnover intention in the study participants.
4. To identify factors associated with turnover intention among Mongolian nurses.

1.3. Definition of Terms

1.3.1. Burnout

- Theoretical definition

Burnout is conceptualized as a response to job stress that arises when stressors become overwhelming, leading to physical, mental, and emotional exhaustion. It encompasses phenomena such as a negative self-concept, a negative attitude toward work, and a loss of interest in work (Pines & Kanner, 1982).

- Operational definition

In this study, burnout was quantified using scores obtained from the Copenhagen Burnout Inventory (CBI), which was administered in Mongolian as adapted by Sugarmaa et al. (2011).

1.3.2. Job Crafting

- Theoretical definition

Job crafting is a proactive approach that allows individuals to reshape their job roles and tasks to better align with their strengths, interests, and values. This process involves modifying tasks, relationships, and perceptions of one's job to enhance a sense of meaningfulness and fulfillment (Wrzesniewski & Dutton, 2001).

- Operational definition

In this study, job crafting was measured using the Job Crafting Scale, which was developed by Wrzesniewski & Dutton in 2001 and later validated by Slep (2013).

1.3.3. Nursing work environment

- Theoretical definition

The nursing work environment includes the physical, social, and organizational factors that affect nurses' work experiences and outcomes.

Key elements of this environment are workload, staffing levels, leadership support, teamwork, and resource availability (Lake, 2002).

- Operational definition

In this study, the nursing work environment was quantified using the Nursing Work Index (NWI) developed by Lake (2002).

1.3.4. Turnover intention

- Theoretical definition

Turnover intention refers to an employee's tendency or willingness to voluntarily leave their current job or organization in the near or foreseeable future (Mobley et al., 1979).

- Operational definition

In this study, turnover intention was measured using a tool developed by Hinshaw & Atwood (1978).

2. CONCEPTUAL FRAMEWORK

The conceptual framework for this study was developed based on previous research, and includes factors related to nurses' turnover intentions. This framework is depicted in Figure 1.

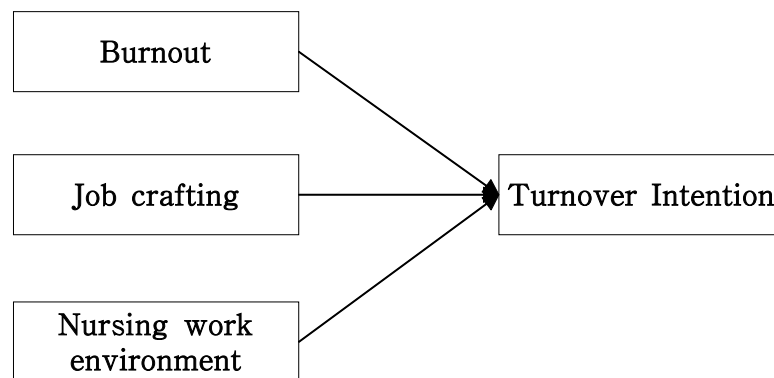


Figure 1. Conceptual Framework

Burnout significantly affects nurses' intentions to leave their positions (Kelly et al., 2021; Dall'Ora et al., 2020; Bayer et al., 2021). The emotional exhaustion, depersonalization, and reduced personal accomplishment that nurses experience contribute to feelings of dissatisfaction and disengagement, ultimately increasing the likelihood of turnover (Maslach et al., 2016; Bianchi et al., 2015; Adriaenssens et al., 2015).

Job crafting behaviors have been identified as factors influencing nurses' turnover intentions (Baghdadi et al., 2021; Tims et al., 2012; Chu et al., 2022). By proactively redesigning and customizing their job roles and responsibilities, nurses can enhance their job satisfaction and sense of fulfillment, thereby reducing their inclination to leave their current positions

(Ghazawy et al., 2021; Yun et al., 2024; Tims et al., 2013).

According to a study by Shin et al. (2023) targeting nurses in general hospitals, it was found that a more positive perception of the nursing work environment corresponded to lower turnover intention. Similarly, a study by Kwon & Kim (2012) focusing on nurses in small and medium-sized hospitals demonstrated that a positive view of the nursing work environment significantly reduced turnover intention.

Therefore, to identify factors associated with nurses' turnover intention, which serves as the dependent variable, we selected burnout, job crafting, and the nursing work environment as independent variables.

3. RESEARCH METHODS

3.1. Research design

This study was a cross-sectional descriptive design aimed at identifying factors associated with nurse turnover among nurses in Mongolia.

3.2. Participants

The target population for this study comprised nurses employed at medical institutions across Mongolia. The accessible population included nurses working at two tertiary hospitals in Ulaanbaatar. These hospitals, both tertiary general facilities with internal medicine and surgical wards, offer specialized services in accordance with established clinical guidelines and treat patients with comparable severity levels.

The required sample size for the research was calculated using the G*Power 3.1.9.7.4 program for linear multiple regression. Based on a previous study (Faul et al., 2009), with a significance level of .05, power of .80, a medium effect size of 0.15, and 11 predictor variables (8 general characteristics such as age, marital status, education level, years at the current working department, current working department, working hours, monthly income satisfaction, and job satisfaction, as well as the variables of burnout, job crafting, and nursing work environment), the minimum required sample size was determined to be 123 participants. Considering a dropout rate of 10%, 136 participants were recruited. Among these, 123 participants were analyzed, excluding cases where responses were inappropriate or insincere.

The criteria for the inclusion and exclusion of research participants were as follows:

Inclusion Criteria

- 1) Nurses with more than 1 year of clinical experience
- 2) Participants who voluntarily agreed to participate in the study

Exclusion Criteria

- 1) Nurses with less than 1 year of clinical experience (Detlin et al.,2022)
- 2) Contract nurses.
- 3) Individuals currently serving as nursing managers, as per the data collection criteria.

3.3. Research Instruments

The structured survey employed in this study comprised 93 questions, divided into five categories: general characteristics (14 questions), burnout (17 questions), job crafting (19 questions), the nursing work environment (31 questions), and turnover intention (12 questions).

3.3.1. Turnover Intention

Turnover intention, which reflects an employee's inclination or readiness to voluntarily leave their current job or organization soon or in the foreseeable future, was assessed using a measurement tool developed by Hinshaw and Atwood in 1978. This tool comprises 12 questions, each rated on a Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), allowing for a total score between 12 and 84. Higher scores denote greater turnover intention. In the original study by Hinshaw and Atwood (1978), Cronbach's alpha was .84. In a more recent study by Sujin Nam (2021), it reached .91. In the current study, Cronbach's alpha was .75.

3.3.2. Burnout

Burnout is defined as a prolonged state of psychological, mental, and physical exhaustion resulting from extended exposure to stressors in the work environment. This condition was measured using the CBI in Mongolian, following the methodology of Sugarmaa et al. (2011). The CBI consists of 17 questions divided into three categories: 5 questions on personal burnout, 7 on work-related burnout, and 5 on client-related burnout. Each question is scored on a scale from 0 to 100 using a Likert-type scale with five response categories. Higher scores indicate greater levels of burnout. The reliability of

the measurement tool in the study by Sugarmaa et al. (2011) was reported with a Cronbach's alpha of .82, while in this study, it was .91.

3.3.3. Job Crafting

To assess job crafting, we employed the "Job Crafting" measurement tool, which was developed by Wrzesniewski and Dutton in 2001 and later validated by Slemp in 2013. This tool comprises 19 questions, divided into three categories: 7 on task crafting, 5 on relational crafting, and 7 on cognitive crafting. Responses are scored using a Likert scale ranging from 1 (not at all) to 6 (always), allowing for a total score between 19 and 114. Higher scores reflect greater levels of job crafting. In Slemp's 2013 study, the Cronbach's alpha was .91, whereas in this study, it was .89.

3.3.4. Nursing Work Environment

The NWI, developed by Lake in 2002, was utilized to assess the nursing work environment. This index includes 31 items that cover various aspects of nurses' work in hospitals, organized into five subdomains: nurse participation in hospital affairs, foundation for quality nursing care, nurse manager ability, leadership and support, adequacy of staff and resources, and nurse-physician relationships. Each item is rated on a Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree), with the total scores varying from 31 to 124. Higher scores reflect a more favorable nursing work environment. In Lake's 2002 study, Cronbach's alpha values ranged from .64 to .91. Similarly, in the study by Jo et al. in 2011, Cronbach's alpha was reported as .93, while in the current study, it was .91.

3.3.5. General Characteristics

The questions on general characteristics and nursing work characteristics were derived from a literature review of previous studies. Data collection involved 14 questions covering age, gender, marital status, education, years of work experience, current working department, years in the current working department, experience of leaving work, career before becoming a nurse manager, monthly income, satisfaction with monthly income, job satisfaction, working schedule, and working hours.

3.4. Data collection

Data collection took place at State Second Central Hospital and Brilliant Hospital, both situated in Ulaanbaatar, Mongolia. This occurred over a three-week period, from February 20th to March 8th, 2024, following the receipt of IRB approval (CR323143) from the Yonsei University Hospital review committee. The research data were gathered after providing a detailed explanation of the study to the heads of the research departments at both hospitals. Subsequent meetings were held with the nursing manager in each nursing department to secure permission. In the conference room of the nursing department at each hospital, a comprehensive presentation was given to the research participants. This presentation covered the study's objectives, methodology, potential risks, and anticipated benefits. Consent forms were individually obtained from those who voluntarily agreed to participate in the study at each hospital, followed by the administration of a questionnaire. Upon completion of the survey, it was immediately sealed and placed in a dedicated box to ensure the anonymity and confidentiality of the information collected.

3.5. Ethical considerations

This study adhered to ethical standards, ensuring the protection of participants' rights throughout the research process. The purpose and methods of the research, along with any related risks and potential benefits, were clearly communicated to participants. Additionally, their privacy and confidentiality were strictly maintained.

Before being included in the study, participants were provided with a consent form, which they voluntarily reviewed and signed. They were also instructed to contact the researcher with any questions during the study period. To ensure confidentiality, completed questionnaires were stored in sealed envelopes. All collected data was treated as confidential and encrypted to prevent the identification of participants. Personal information, such as gender, age, and marital status, was kept confidential and could not be accessed by anyone other than the study participants. Electronic documents were password-protected, and physical materials were stored in a securely locked location. At the end of the study period, electronic documents will be permanently deleted, and paper documents will be securely destroyed using a shredder.

3.6. Data analysis

The data were analyzed using the statistical software SPSS 25.0. The details of the statistical methods are presented below.

1. The general characteristics of the subjects and the study variables were analyzed using descriptive statistics, including frequency, percentage, and mean standard deviation.
2. The differences in turnover intention based on the general characteristics of the participants were analyzed using the t-test and one-way ANOVA.
3. The relationships among participant burnout, job crafting, nursing work environment, and nurse turnover intention were analyzed using the Pearson correlation coefficients.
4. Factors related to nurses' turnover intention were identified using multiple regression analysis.

4. RESEARCH RESULTS

4.1. General characteristics of participants

The general characteristics of the participants of this study were as follows <Table 1>. The average age of the participants was 34.07 years (SD = 9.07), with 120 women (97.6%) and 71 participants (57.7%) reporting being married. Additionally, 110 participants (89.4%) held at least a bachelor's degree. On average, participants had 10.13 years of experience working as nurses (SD = 8.53), with their experience ranging from 1.17 to 34 years. They were distributed across various departments, with 96 participants (78.0%) working in general units and 27 participants (22.0%) in special units. The average tenure in their current department was 6.30 years (SD = 6.46). Work schedules varied, with 52 participants (42.3%) having regular work hours and 71 participants (57.7%) working shifts. Participants worked an average of 56.72 hours per week (SD = 17.35). Regarding job turnover, 33 participants (26.8%) reported having left a job, with an average duration of 8.44 months (SD = 15.30). Thirteen percent of participants reported having prior experience as nurse managers before their current role. The average monthly income for participants was 1352.51 thousand tögrög (SD = 129.64). Satisfaction with monthly income had an average score of 2.67 (SD = 0.88), while job satisfaction scored an average of 3.54 (SD = 0.76).

Table 1. General characteristics of participants (N=123)

	Characteristics	Categories	n (%) or M±SD	Range
Demographic characteristics	Age(yr)		34.07±9.07	22~54
	Gender	Male	3 (2.4)	
		Female	120 (97.6)	
	Marital status	Married	71 (57.7)	
		Not married	52 (42.3)	
	Education level	Diploma	13 (10.6)	
		Bachelor's degree and above	110 (89.4)	
Work-related characteristics	Years of work as a nurse(yr)		10.13±8.53	1.17~34
	Current working department	General unit	96(78.0)	
		Special unit	27(22.0)	
	Years at the current working department(yr)		6.30±6.46	0.42~32
	Working schedule	Regular work	52 (42.3)	
		Shift work	71 (57.7)	
	Working hours (per week)		56.72±17.35	
	Experience leaving work	Yes	33(26.8)	
		No	90(73.2)	
	Leaving work(months) * n=33		8.44±15.30	0.03~6
	Previous career as a nurse manager	Yes	16(13.0)	
		No	107(87.0)	
	Monthly income(1000 tögrög)		1352.51±129.64	110~1800
	Monthly income satisfaction		2.67±0.88	1~5
	Job satisfaction		3.54±0.76	1~5

M=mean; SD=standard deviation

4.2. Description of burnout, job crafting, nursing work environment, and turnover intention

The burnout, job crafting, nursing work environment, and turnover intention of the participants are detailed in <Table 2>. The burnout score was recorded at 46.93 (SD = 15.08) on a scale ranging from 0 to 100 points. The job crafting score was 4.08 (SD = 0.67) measured on an item scale from 1 to 6, resulting in a total possible score between 19 and 114. The nursing work environment score was 2.73 (SD = 0.44), calculated on an item scale from 1 to 4, with the total score ranging from 31 to 124. The turnover intention score was 3.77 (SD = 1.16), assessed on an item scale from 1 to 7, with a total possible score between 6 and 42.

Table 2. Descriptive statistics for burnout, job crafting, nursing work environment, and turnover intention (N=123)

Variables	Number of items	Scale	M±SD	Range	Item mean
Burnout	17	0-100	46.38±.85	0~100	46.93±15.08
Job crafting	19	1-6	77.56±12.63	19~114	4.08±0.67
Nursing work environment	31	1-4	84.77±13.93	31~124	2.73±0.44
Turnover intention	6	1-7	22.64±6.94	6~42	3.77±1.16

M=mean; SD=standard deviation

4.3. Differences in turnover intention according to general characteristics

Turnover intention according to the participants' general characteristics is presented in <Table 3>. Significant difference in turnover intention were observed based on age ($r=-.19$, $p=.036$), job satisfaction ($r=-.39$, $p<.001$), and satisfaction with monthly income ($r=-.19$, $p=.038$).

Table 3. Differences in turnover intention according to general characteristics (N=123)

	Characteristics	Categories	M±SD	t/F/r(p)
Demographic characteristics	Age(yr)			-.19(.036)
	Gender	Male	2.50±1.17	0.11(.736)
		Female	3.80±1.14	
	Marital status	Married	3.76±1.16	0.13(.721)
		Not married	3.78±1.17	
	Education level	Diploma	3.67±1.32	0.79(.372)
		Bachelor's degree and above	3.78±1.14	
Work-related characteristics	Years of work as a nurse(yr)			-.16(.081)
	Current working department	General unit	3.79±1.08	4.72(.052)
		Special unit	3.70±1.41	
	Years at the current working department (yr)			-.13(.157)
	Working schedule	Regular work	3.62±1.28	0.06(.806)
		Shift work	3.88±1.17	
	Working hours (per week)			.04(.656)
	Experience leaving work	Yes	4.00±1.16	0.10(.747)
		No	3.69±1.15	
	Leaving work(months) * n=33			.01(.980)
	Previous career as a nurse manager	Yes	3.97±1.16	0.01(.918)
		No	3.74±1.16	
	Monthly income(1000 tögrög)			-.10(.288)
	Monthly income satisfaction			-.19(.038)
	Job satisfaction			-.39(<.001)

M=mean; SD=standard deviation

4.4. Correlations among burnout, job crafting, nursing work environment and turnover intention

The results of the analysis exploring the correlations among burnout, job crafting, the nursing work environment, and turnover intention among participants are detailed in <Table 4>. Turnover intention showed a significant positive correlation with burnout ($r=.36$, $p<.001$) and a significant negative correlation with the nursing work environment ($r=-.30$, $p<.001$). These finding suggest that higher burnout levels and a poorer nursing work environment are linked to an increased intention to leave the job. Additionally, a significant positive correlation was observed between job crafting and the nursing work environment ($r=.42$, $p<.001$).

Table 4. Correlations among burnout, job crafting, nursing work environment and turnover intention (N=123)

Variables	Burnout	Job crafting	Nursing work environment	Turnover intention
	$r(p)$	$r(p)$	$r(p)$	$r(p)$
Burnout	1			
Job crafting	-.08 (.351)	1		
Nursing work environment	-.17 (.064)	.42 ($<.001$)	1	
Turnover intention	.36 ($<.001$)	-.08 (.403)	-.30 ($<.001$)	1

4.5. Factors associated with nurses' turnover intention

Multiple regression analysis was conducted to identify factors related to turnover intention, including age, monthly income satisfaction, and job satisfaction. These factors showed significant differences in general characteristics, as presented in <Table 5>. To test the assumptions of regression analysis, multicollinearity was examined; the tolerance limit exceeded 0.1 and the variance inflation factor (VIF) was below 10, indicating that multicollinearity was not a concern. The Durbin-Watson index was 1.935, close to the standard value of 2, confirming the absence of correlation between the residuals. The regression model was deemed suitable with an F-value of 7.65 ($p<.001$), and it explained 24.7% of the variance. Independent variables related to turnover intention included burnout ($\beta=.19$, $p=.031$) and nursing work environment ($\beta=-.27$, $p=.003$), both of which had a statistically significant impact. Thus, higher levels of burnout and lower scores in the nursing work environment were associated with increased turnover intention.

Table 5. Factors associated with nurses' turnover intention (N=123)

	B	SE	β	t	p	Tolerance	VIF
(Constant)	6.59	1.01		6.51	.001		
Age	-.03	.01	-.21	-2.50	.014	.895	1.117
Monthly income satisfaction	-.12	.11	-.09	-1.11	.270	.898	1.114
Job satisfaction	-.34	.14	-.22	-2.49	.014	.762	1.313
Burnout	.01	.01	.19	2.18	.031	.814	1.228
Job crafting	.21	.15	.12	1.36	.177	.783	1.278
Nursing work environment	-.70	.23	-.27	-2.99	.003	.739	1.353
F=7.65, R ² = .284, Adjust R ² = .247							

5. DISCUSSION

5.1. Factors associated with nurses' turnover intention

This study aimed to identify factors associated with nurse turnover intentions in Mongolia, with a specific focus on burnout, job crafting, and the nursing work environment.

In this study, the average turnover intention score was 22.64, closely aligning with the score of 22.19 reported in a previous study conducted in Korea (Nam, 2021). Turnover intention is associated with the retention of nursing staff, management, and the quality of patient care (Liu et al., 2023; Kuntardina, 2017). Although turnover intention was at an intermediate level, it is significant to identify factors influencing the turnover intention of Mongolian nurses, given previous research demonstrating its impact on patient care quality and hospital management (Tsogbadrakh et al., 2020; Biro, 2021).

This study found that the nursing work environment significantly influences nurse turnover, consistent with previous research demonstrating a negative correlation between perceived nursing work environments and turnover intention (Patrician et al., 2022; Eun & Bohyun, 2016). Empirical evidence underscores the significant impact of the nursing work environment on nurse turnover rates and patient outcomes. For instance, Olds et al., (2017) discovered that improvements in the nursing work environment were linked to reduced nurse turnover rates and enhanced patient outcomes, such as decreased mortality rates and heightened patient satisfaction scores. Similarly, Kutney-Lee et al. (2013) highlighted that nurses operating within favorable work environments exhibited higher job satisfaction levels and delivered superior quality of care to patients. These important findings show that improving the nursing work environment is essential. Such improvements benefit both nurses and patients

The results of this study underscore the necessity of efforts to improve the nursing work environment. In particular, in this study, among the sub-domains of the nursing work environment, the "Staff and Resource Adequacy" area had a low score, which is thought to partially reflect the difficulties faced by nurses due to insufficient manpower and resources in the nursing work environment. The lack of staff resources in Mongolia can be attributed to several factors, including limited healthcare funding, a shortage of trained medical personnel, and challenges in retaining existing staff due to low salaries and difficult working conditions (Okutsu et al., 2019; Altantsetseg, 2023). Addressing these issues requires adequate staffing, effective personnel and resource management, and heightened awareness of the nursing environment throughout Mongolia.

In this study, the burnout level was measured at 46.93 aligning with findings from other countries. For instance, Moisoglou et al. (2021) reported a burnout score of 47.7 among nurses, and another study indicated a score of 49.8 among Thai nurses (Montgomery et al., 2021). These scores highlight significant emotional and physical exhaustion, primarily attributed to factors like workload and job demands. Consequently, burnout represents a critical issue for nurses across various global health systems. When comparing the mean scores of different burnout scales in the study, it is evident that work-related burnout registers the highest mean score. This is followed by personal burnout and then client-related burnout. Such a pattern underscores that factors inherent to the work environment, including workload, organizational culture, and interpersonal dynamics, are likely major contributors to burnout among Mongolian nurses (Clinton et al., 2022; Tran et al., 2023; Bagaajav et al., 2011).

Addressing burnout through interventions such as promoting mental health, managing workload, and improving work conditions is critical to improving and maintaining nurse well-being (Mealer et al., 2009). In Mongolia, nurses face high,

workloads, low salaries, and insufficient societal recognition (Okutsu et al., 2019; Dovdon et al., 2022). Consequently, many newly graduated students often avoid entering the profession, leading to a shortage of nursing staff (Liang et al., 2018). This shortage forces current nurses to work beyond their designated hours, often covering 24/48-hour shifts, which is exhausting. As a result, when patients seek healthcare, delays in receiving prompt care pose significant risks to their health and endanger the healthcare system if adequate care is not provided quickly. Previous studies have suggested providing spaces within healthcare facilities for activities such as fitness, yoga, and relaxation therapy to combat burnout (Misra & Mandal, 2021). Providing access to these resources during breaks can help reduce work-related burnout and improve mental health (Zhou et al., 2024). Listening to relaxing music or incorporating guided meditation into the work environment can provide nurses with effective tools to manage stress and prevent burnout (Akçay & Kazan, 2024; Fattahpour et al., 2024). International healthcare organizations already use dedicated relaxation areas with background music or soothing sounds to create a pleasant work environment (Lu et al., 2024).

Implementing programs that manage workload and reduce stress, along with strategies that promote work-life balance, can help prevent burnout and decrease turnover rates among nurses.

The research findings indicated that job crafting did not have a significant direct effect on turnover intention. However, there was a positive correlation between job crafting and the nursing work environment, suggesting that nurses who engage in job crafting tend to have a more favorable view of their work environment (Chang et al., 2020; Sujeong, 2022). These results underscore the importance of promoting job crafting as a proactive strategy to enhance job satisfaction and indirectly reduce turnover intention.

This study highlights the critical role of addressing factors such as the work

environment and burnout in reducing nurse turnover intentions in Mongolia. By implementing targeted interventions based on these findings, healthcare organizations can effectively retain nursing staff and ensure the delivery of high-quality patient care. Such efforts likely to significantly improve nurse retention rates and healthcare outcomes in Mongolia, ultimately contributing to sustainable healthcare workforce practices and enhancing population well-being.

5.2. Limitations

This study was carried out in two hospitals within the same city in Mongolia, which constrains the generalizability of the results. Furthermore, since both hospitals are in good condition, the turnover intention among nurses was found to be average. Consequently, caution should be exercised in interpreting the findings, as they may not accurately reflect the diversity of healthcare settings throughout Mongolia.

Methodologically, our reliance on self-report measures and a cross-sectional design may have introduced biases and limitations. Future research would benefit from employing longitudinal designs and objective measures to more effectively capture the dynamic nature of nurse turnover and its determinants. Furthermore, understanding job turnover among nurses in Mongolia, requires considering both cultural and organizational contexts. Future research should explore the interaction between cultural factors and organizational practices to better understand their influence on nurse turnover across various healthcare settings.

5.3. Implications

First, this study makes an important contribution by providing basic information about the need to reduce nurses' burnout, improve nurses' working environment, and reduce turnover intentions. Healthcare organizations should implement targeted interventions such as mental health promotion programs, workload management strategies, and professional development opportunities to increase nurses' well-being and job satisfaction.

Second, the positive relationship between the nursing work environment and nurse control suggests that providing nurses with more autonomy and flexibility in their assignments enhances the work environment and consequently reduces turnover. Supporting nurses' initiative and implementing policies that foster job creation are beneficial strategies.

Finally, this study can contribute to a broader body of knowledge that can inform healthcare policymakers regarding the development of comprehensive retention strategies that include competitive compensation, career advancement opportunities, and a supportive work environment. By addressing these factors, Mongolia's healthcare system can improve nurse retention and create a more sustainable and effective nursing workforce capable of providing high-quality patient care.

6. CONCLUSION

6.1. Conclusion

In conclusion, this study identified the nursing work environment and burnout as major factors related to reducing nurse turnover intentions in Mongolia. Therefore, it was found that improving staffing and resources is necessary to enhance the nursing work environment in Mongolia, and interventions aimed at reducing burnout are also needed. These efforts have the potential to enhance nurse retention and improve healthcare outcomes in Mongolia, thereby contributing to the sustainability of the healthcare workforce.

6.2. Suggestions

The findings of this study suggest the following recommendations.

It is important to develop and implement strategies to improve the work environment for nurses. A supportive and well-structured work setting can significantly reduce nurses' intentions to leave their jobs.

Introducing effective methods to alleviate burnout is essential. Burnout significantly contributes to nurses' willingness to leave the profession, and addressing it can improve retention and job satisfaction.

Additional studies are necessary to deepen our understanding of the factors that influence nurses' intentions to leave their positions. This knowledge will form a solid basis for developing targeted interventions aimed at enhancing nurse retention and job satisfaction.

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Appendix

Appendix 1. Description of the subscales of study variables

Variables	Category	Number of items	M±SD	Item mean
Burnout	Personal Burnout Scale	5	48.78±17.11	14.76±3.42
	Work-Related Burnout Scale	7	50.43±17.51	21.12±.44
	Client-Related Burnout Scale	5	40.17±16.97	13.03±.30
	Total	17	46.93±15.08	46.38±.85
Job crafting	Task Crafting	7	26.11±5.70	3.11±.67
	Cognitive Crafting	5	21.01±4.26	3.50±.71
	Relation Crafting	7	31.89±5.76	3.80±.69
	Total	19	77.56±12.63	4.08±0.67
Nursing work environment	Nurse Participation in Hospital Affairs	9	23.22±5.52	2.58±.61
	Nursing Foundations for Quality of Care	10	29.81±5.29	2.98±.53
	Working with Nurses Who are Clinically Competent	5	13.66±3.15	2.73±.63
	Staff and Resource Adequacy	4	9.07±3.07	2.27±.77
	Collegial Nurse-Physician Relation	3	8.99±2.24	2.99±.75
	Total	31	84.77±13.93	2.73±0.44
Turnover intention	Total	6	22.64±6.94	3.77±1.16

Appendix 2.1. Survey explanation (Korean)

[WSCH] 표준 권고 연구대상자 설명문 및 동의서 [임상연구]

원주세브란스기독병원
Yonsei Sebelastic Christian Hospital

연구대상자 설명문

연구 제목: 몽골 간호사의 이직의도 관련요인

시험 책임자: 연세대학교 원주간호대학 진자야 (석사과정생)

이 설명문은 이 연구에 대한 귀하의 이해를 돕기 위해 마련된 것이고, 이 연구에 대한 자세한 내용을 담고 있으니 이 설명문을 읽고 충분히 이해하고 생각하신 후에 참여 여부를 결정해주시기 바랍니다.

연구는 아직까지 명확하게 확인되지 않은 부분을 알아보기 위한 목적에서 이루어지는 것입니다. 그러므로 귀하는 이 연구에 참여할 지 여부를 결정하기에 앞서, 이 연구의 목적과 절차, 어떤 사람들이 이 연구에 참여하는지, 이 연구에 참여할 때 기대할 수 있는 이익과 위험하거나 불편한 점은 무엇인지 등에 대하여 연구에 대해 충분히 설명을 듣고 이해하시는 것이 중요합니다.

만약 귀하가 이 연구에 참여하기로 결정하신다면 동의 의사를 동의서에 표시하여 주시기 바랍니다.

귀하께서 자발적으로 동의하여 동의서를 작성하시는 경우에 연구에 참여하실 수 있으며 귀하께서는 이 연구에 참여하지 않기로 결정할 수도 있습니다. 참여하지 않기로 결정하더라도 귀하께는 아무런 영향이나 어떠한 불이익도 없을 것입니다.

1. 임상연구가 이루어지는 배경 및 목적

간호사 이직 의도는 환자 간호의 질, 병원의 재정적 부담, 생산성 및 간호사의 직장 만족도에 중요한 영향을 미칩니다. 빈번한 이직은 기관에 남아 있는 간호사의 직장 분위기와 직장 만족도를 저하시킬 수 있으며, 이로 인한 소진을 초래할 수 있습니다. 최근 몽골내 보건의료기관에서의 간호사 이직 또한 보건의료계의 중요한 문제로 인식되고 있습니다. 간호사 이직에 대한 관련요인을 파악하는 것은 간호사 부족 현상을 감소시키고, 간호사의 이직을 줄이기 위한 중재를 개발하기 위한 전략적 통찰력을 제공할 수 있습니다. 이를 통해 몽골 의료 시스템 내에서 환자 간호의 질을 향상시키고 간호 관리자가 이직 관련 문제에 대처하는 데 도움이 될 수 있을 것입니다. 이에 이 연구는 몽골에서 간호사들의 이직의도와 이직과 관련된 주요 요인을 확인함으로써 간호사의 이직의도를 감소시키는 중재 전략을 도출하기 위한 기초자료를 제공할 수 있으며, 이는 궁극적으로 몽골 의료 시스템과 간호 관리자들의 환자 간호의 질을 향상시키는 데 도움이 될 것입니다.

2. 임상연구에 참여하는 대상자의 수, 기간과 장소

본 연구는 몽골 울란바토르(Ulaanbaatar)에 위치한 브릴리언트 병원(Brilliant), 국립 제 2 중앙 병원(National 2nd Central Hospital), 몽골국립의과대학 몽골-일본 병원(Mongol-Japan Hospital of Mongol National University of Medical Science)에서 근무 중인 총 136명의 간호사를 대상으로 합니다. 본 연구의 대상자는 1년 이상의 임상 경력이 있는 정규직 간호사로, 1년 미만의 임상 경력이 있는 정규직 간호사나 계약직 간호사, 자료수집 기준 현재 간호관리자인 자는 제외됩니다. 귀하께서 연구참여에 동의하실 경우, 연구자가 병원에 방문하여 연구에 대한 설명문을 통한 설명을 직접 제공하고 구조화된 설문지를 배부할 것이며, 참여자는 설문작성 기한내에 작성한 설문지를 병동 내 설치된 회수 박스를 통해 회수하도록 계획되어 있습니다.

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3. 임상연구의 절차 및 방법

본 연구에서 귀하를 대상으로 진행되는 연구의 절차는 다음과 같습니다.

- 1) 귀하가 이 연구에 참여하기로 결정하셨다면, 아래의 대상자 동의서 양식에 서명하시게 됩니다. 서명 전 연구에 관하여 궁금한 사항이 있다면 연구자에게 질문하여 주십시오.
- 2) 동의서에 서명하신 이후, 연구자는 귀하가 이 연구의 참여자로 등록될 수 있는 기준에 해당하는지를 확인할 것입니다.
- 3) 본 연구의 설문지는 총 93문항의 질문으로 구성되어 있으며, 일반적인 특성(14개 문항), 소진(17개 문항), 잡크래프팅(19개 문항), 간호 근무 환경(31개 문항), 그리고 이직 의도(12개 문항)를 포함하고 있습니다. 설문 조사를 위한 소요시간은 약 15분 정도입니다.
- 4) 완료된 설문자료는 밀봉하여 정해진 장소에 비치해 된 박스에 넣어 주시면 연구자가 수거할 예정입니다.

4. 인체유래물 등의 수집 및 보관, 폐기에 관한 사항

본 연구에서는 인체유래물을 수집하지 않습니다.

5. 임상연구에 참여하여 기대할 수 있는 이익

연구 참여로 인해 직접적인 이익은 없으나, 궁극적으로 귀하의 참여는 몽골 간호 분야의 이직의도를 감소시키기 위한 방안을 모색하고 전략을 개발하는 데 도움이 되어 환자 간호의 질을 향상시키는 데 기여할 것입니다.

6. 임상연구에 참여하여 예상되는 위험 및 불편

본 연구의 설문조사에 응하기 위해 시간을 할애해야 하거나 설문 문항에 응답하기 위해 과거 기억을 회상해야 하는 등의 불편이 일부 있을 수 있지만, 그 외에 연구와 관련된 큰 불편감 및 예상되는 위험성은 없습니다. 본 연구진행 중 불편 및 위험이 발생한다고 판단되는 경우 언제든지 연구에서 철회하실 수 있습니다.

7. 대체 치료 방법

본 연구는 설문조사 연구로 해당되지 않습니다.

8. 임상연구 참여에 따른 비용

본 연구에 참여하는 것으로 인해 귀하에게 어떠한 비용도 발생되지 않습니다.

9. 임상연구 참여에 따른 금전적 보상

귀하가 설문조사에 참여하시는 것에 대하여 5,000 원 (\$5.00) 이하의 사례품(핸드크림)을 지급하여 드립니다.

10. 연구와 관련한 손상이 발생한 경우, 대상자에게 주어질 보상이나 치료방법

본 연구는 설문조사 연구이므로 해당되지 않습니다.

11. 대상자가 준수하여야 하는 사항

귀하는 이 연구에 참여하시는 동안 설문조사에 성실하게 응답하여 주시기 바랍니다. 또한, 연구 참여 중 불편감이 발생할 경우 연구자에게 알려 주시기 바라며, 연구진행과 관련하여 자세한 사항은 연구자에게 문의하시면 설명 드리도록 하겠습니다.

12. 임상연구 참여에서의 중도 탈락

연구 도중 참여자가 어려움을 호소하면 언제든지 참여를 철회할 수 있으며, 연구 참여 중 중도탈락 및 철회는 귀하에게 부정적인 영향을 주지 않습니다. 동의 후 철회하거나 설문응답이 중단된 경우 연구참여 자로부터 제외될 수 있으며 수집된 종이 문서는 즉시 분쇄기를 통해 파괴되며 전자 문서는 영구적으로 삭제됩니다.

13. 정보 수집 및 제공

본 동의서에 서명함으로써 귀하는 연구진이 귀하의 개인(민감)정보를 수집하고 사용하는데 동의하게 됩니다.

1) 개인정보의 수집·이용 목적

귀하의 개인정보를 수집 및 이용하는 목적은 몽골 간호사의 이직의도에 영향을 미치는 요인을 확인하기 위한 목적입니다.

2) 수집하려는 개인(민감)정보의 항목

귀하의 나이, 성별, 결혼상태, 교육수준, 이직 경험 유무, 월 수입, 월 수입 만족도

3) 개인정보의 보유 및 이용 기간

귀하의 개인(민감)정보를 보유 및 이용하는 기간은 연구 종료 후 3년 동안이며, 이 후 즉시 폐기 될 것 입니다.

4) 동의를 거부할 권리가 있다는 사실 및 동의 거부에 따른 불이익이 있는 경우에는 그 불이익의 내용

귀하는 위 개인(민감)정보 수집 및 이용, 제공에 대한 수락 여부를 자유롭게 결정할 수 있습니다. 귀하가 개인(민감)정보 수집 및 이용, 제공에 수락하지 않는 경우에도 귀하에 대한 어떠한 불이익도 발생하지 않습니다. 그러나 동의를 거부할 경우 본 연구 참여에 제한을 받을 수 있습니다.

5) 연구에서 수집된 대상 개인정보의 타인 제공 여부

이 연구에서 수집하는 위의 개인(민감)정보는 본 연구 목적 이외의 목적으로 사용되거나 타인에게 제공되지 않습니다.

14. 개인정보 및 기록에 대한 비밀보장

- 1) 귀하가 이 연구에 참여하시는 동안에 수집되는 귀하의 기록은 비밀로 보장될 것이며, 연구의 결과가 보고서로 작성되거나 출판, 또는 발표되는 경우에도 귀하의 신원을 파악할 수 있는 기록은 비밀 상태로 유지될 것입니다.
- 2) 이 연구를 모니터/점검하는 자, 연구심의위원회, 임상시험심사위원회 등은 귀하의 비밀을 침해하지 않고 관련 법령 및 규정에 따라 연구의 실시 절차와 자료의 신뢰성을 검증하기 위하여 귀하의 의무기록을 직접 열람할 수 있으며, 귀하는 본 동의서 서식에 서명함으로써 귀하 또는 귀하의 법정대리인이 이러한 자료의 직접 열람을 허용하시게 됩니다.
- 3) 대상자의 계속 연구 참여결정에 영향을 미칠 수 있는 새로운 정보가 획득되면 연구자는 적시에 대상자 또는 대리인에게 알릴 것입니다.
- 4) 연구목적으로 수집된 개인정보는 연구담당자가 익명으로 코딩하여 자료분석시 개인 식별을 할 수 없도록 할 것입니다. 수집된 자료는 컴퓨터 저장시에 문서 비밀번호를 설정하여 개인정보가 노출되지 않도록 관리할 것이며, 연구와 관련된 기록은 연구종료 후 3년간 보관 후 컴퓨터 파일은 영구삭제, 종이문서는 파쇄기를 사용하여 영구적으로 폐기될 것입니다.

15. 참여/철회의 자발성

귀하는 언제든지 연구 참여에 대해 동의를 철회할 수 있으며, 이 경우, 연구 참여는 종료되고 연구자는 귀하에게 연구와 관련하여 추가적인 정보를 수집하지 않을 것입니다. 만일, 수집된 정보를 폐기하여 이용되지 않기를 원한다면, 귀하는 연구자에게 연락하여 귀하의 의사를 전달하셔야 합니다. 연구에 참여하지 않거나 중도에 그만 두기로 결정하더라도 귀하에 대한 어떠한 불이익이 발생하지 않을 것이며 귀하가 원래 받을 수 있는 이익에 대한 어떠한 손실도 없을 것입니다. 또한 동의철회 이전까지 수집된 귀하의 정보는 연구에 사용될 수 있지만, 더 이상 새로운 연구 정보를 수집하지 않을 것입니다.

16. 연락처

연구에 관한 질문에 연구책임자 또는 연구담당자가 답변을 할 것입니다. 연구기간 중 본인이나 법정대리인이 언제라도 질문을 하실 수 있으며 모든 의문점에 대하여 연락을 주시기 바랍니다.

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연구에 참여하는 동안 참여자로서의 복지 및 권리에 대한 질문이 있는 경우 또는 연구와 직접적으로 관련되지 않은 누군가와 상담을 원하는 경우는 연구심의위원회 다음의 번호로 문의하실 수 있습니다.

연세대학교 원주세브란스기독병원 연구심의위원회 ☎ 033-741-1702-03

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Appendix 2.2. Survey explanation (Mongolian)

[WSCH] 표준 권고 연구대상자 설명문 및 동의서 [임상연구]

원주세브란스기독병원
Wonju Severance Christian Hospital

Судалгаанд оролцогчдод зориулсан тайлбар тэмдэглэл

Судалгааны нэр: Монгол дахь сувилагчийн халаа сэлгээнд хамаарах хүчин зүйлс
Судалгааны судлаач: Чинзаяа, Ёнсей их сургуулийн Вонжу сувилахуйн коллеж,
(Магистрын хөтөлбөрийн оюутан)

Судалгааны талаарх таны ойлголтыг сайжруулахын тулд энэхүү тодорхойлолтыг өгсөн болно. Энэ нь судалгааны талаархи дэлгэрэнгүй мэдээллийг агуулдаг. Оролцох эсэхээ шийдэхээсээ өмнө энэхүү мэдэгдлийг сайтар уншиж, сайтар ойлгоорой.

Судалгааны зорилго нь тодорхой батлагдаагүй байгаа газруудыг судлах явдал юм. Иймд энэхүү судалгаанд оролцох эсэхээ шийдэхээсээ өмнө судалгааны зорилго, журам, хэн оролцох боломжтой, үүнд оролцоход ямар ашиг тус, эрсдэл, таагүй байдал хүлээж болох талаар хангалттай тайлбар, судалгаа болон бусад холбогдох дэлгэрэнгүй мэдээллийг ойлгох нь чухал юм.

Хэрэв та энэхүү судалгаанд оролцохоор шийдсэн бол мэдээлэлжсэн зөвшөөрлийн маягтанд зөвшөөрлөө бичнэ үү. Таны судалгаанд оролцох нь сайн дурын үндсэн дээр явагдах бөгөөд оролцохгүй байх эрхтэй. Оролцохгүй гэсэн шийдвэр танд ямар ч нөлөө үзүүлэхгүй бөгөөд өөр ямар ч сул тал байхгүй.

1. Судалгааны үндэслэл, зорилго

Сувилагчийн ажлын байраа өөрчлөх хүсэл нь өвчтөнд үзүүлэх тусламж үйлчилгээний чанар, эмнэлгүүдийн санхүүгийн дарамт, бүтээмж, сувилагчдын ажлын сэтгэл ханамж зэрэгт ихээхэн нөлөө үзүүлдэг. Байнга солигдох нь тухайн байгууллагад үлдсэн сувилагч нарын ажлын орчин, сэтгэл ханамжид сөргөөр нөлөөлж, ядрахад хүргэдэг. Сүүлийн үед манай улсын эрүүл мэндийн байгууллагуудын сувилагчийн халаа сэлгээ эрүүл мэндийн салбарт тулгамдсан асуудал болоод байна. Сувилагчийн халаа сэлгээтэй холбоотой хүчин зүйлсийг ойлгох нь сувилагчийн хомедолыг бууруулж, интервенцийг хөгжүүлэх стратегийн ойлголтыг өгөхөд тусална.

Сувилагчийн шилжилт хөдөлгөөнд нөлөөлж буй хүчин зүйлсийг тодорхойлох нь сувилагчийн ажлаас гарах хүсэл эрмэлзлийг бууруулах интервенцийн стратегийг боловсруулахад хувь нэмэр оруулна. Энэ нь эргээд Монголын эрүүл мэндийн тогтолцооны өвчтөнд үзүүлэх тусламж үйлчилгээний чанарыг дээшлүүлж, сувилахуйн менежерүүдэд асуудлыг үр дүнтэй шийдвэрлэхэд тусална. Энэхүү судалгаа нь Монгол дахь сувилагчийн шилжилт хөдөлгөөнтэй холбоотой гол хүчин зүйлсийг тодорхойлох зорилготой бөгөөд сувилагчийн ажлаасаа гарах хүсэл эрмэлзлийг ойлгохыг зорьсон. Сувилагчийн шилжилт хөдөлгөөнд нөлөөлж буй хүчин зүйлсийг баталгаажуулснаар сувилагчдын ажлаас гарах хүсэл эрмэлзлийг бууруулах интервенцийн стратегийг гаргаж, эцсийн дүндээ Монголын эрүүл мэндийн систем болон сувилахуйн менежерүүдэд өвчтөний тусламж үйлчилгээний чанарыг сайжруулахад тустай.

2. Судалгаанд оролцогчид (тоо, байршил гэх мэт)

Энэхүү судалгаанд Монгол Улсын Улаанбаатар хотын Бриллиант эмнэлэг, Улсын хоёрдугаар төв болон Анагаах Шинжлэх Ухааны Үндэсний Их Сургуулийн Монгол Японы эмнэлэгт ажиллаж буй нийт 136 сувилагч хамрагдах болно.

Судалгаанд оролцогчид нь 1-ээс дээш жил эмнэлзүйн туршлагатай бүртгэлтэй сувилагчид байна. Эмнэлзүйн үндсэн дээр 1-ээс доош жил ажилласан туршлагатай сувилагч эсвэл гэрээт сувилагч, мэдээлэл цуглуулах үед сувилахуйн менежерээр ажиллаж байгаа хүмүүсийг оруулаагүй болно. Хэрэв та судалгаанд оролцохыг зөвшөөрвөл судлаач эмнэлэг дээр очиж тайлбар бичгээр судалгааны талаар шууд тайлбар өгч, бүтэцлэгдсэн асуулга тараана. Оролцогчид бөглөсөн анкетыг тойрогт суурилуулсан цуглуулгын хайрцаганд заасан хугацаанд буцааж өгнө.

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3. Судалгааны ажлын журам, аргачлал

Энэхүү судалгаанд таны оролцох журам дараах байдалтай байна.

- 1) Хэрэв та энэхүү судалгаанд оролцохоор шийдсэн бол доорх сэдвийн зөвшөөрлийн маягтанд гарын үсэг зурна. Танд гарын үсэг зурахаас өмнө судалгааны талаар асуух зүйл байвал судлаачаас асууна уу.
- 2) Зөвшөөрлийн хуудсанд гарын үсэг зурсны дараа судлаач таныг энэхүү судалгаанд оролцогчоор бүртгүүлэх шалгуурыг хангаж байгаа эсэхийг шалгана.
- 3) Энэхүү судалгааны асуулга нь ерөнхий шинж чанар (14 асуулт), ядарч туйлдсан (17 асуулт), ажлын ур чадвар (19 асуулт), сувилахуйн ажлын орчин (31 асуулт), эргэлтийн зорилго (12 асуулт) зэрэг нийт 93 асуултаас бүрдэнэ. Судалгаа нь ойролцоогоор 15 минут үргэлжилнэ.
- 4) Бүрдүүлсэн судалгааны материалыг битүүмжилж, зориулалтын газар байрлуулсан хайрцагт хийж, судлаач цуглуулна.

4. Хүний гарал үүсэлтэй материалыг цуглуулах, хадгалах, устгах гэх мэт

Энэхүү судалгаанд хүний гарал үүсэлтэй зүйлс цуглуулаагүй болно.

5. Судалгаанд оролцохын ашиг тус

Судалгаанд оролцох нь танд шууд ашиг тусаа өгөхгүй байж болох ч эцсийн дүндээ таны оролцоо нь сувилахуйн салбарт шилжилт хөдөлгөөнийг бууруулах арга замыг судлах, стратеги боловсруулахад хувь нэмэр оруулна. Энэ нь эргээд өвчтөний тусламж үйлчилгээний чанарыг сайжруулахад тусална.

6. Судалгаанд оролцохтой холбоотой хүлээгдэж буй эрсдэл, таагүй байдал

Судалгаанд хариулахын тулд цаг хуваарилах эсвэл судалгааны асуултад хариулахын тулд өнгөрсөн дурсамжаа эргэн санах зэрэг таагүй байдал гарч болзошгүй. Гэсэн хэдий ч судалгаатай холбоотой ямар нэгэн ноцтой таагүй байдал, хүлээгдэж буй эрсдэл байхгүй. Судалгааны явцад танд таагүй байдал, эрсдэл мэдрэгдвэл судалгаанаас татгалзах боломжтой.

7. Эмчилгээний өөр аргууд

Энэхүү судалгаа нь хамааралгүй.

8. Судалгаанд оролцох зардал

Энэхүү судалгаанд хамрагдсанаар танд ямар нэгэн зардал гарахгүй.

9. Судалгаанд оролцох санхүүгийн дэмжлэг

Та судалгаанд оролцосноор 5000 won (5.00 доллар) доторх үнэ бүхий талархлын жижиг бэлэг (гарын тос) авах болно.

10. Судалгаатай холбоотой хохирол учирсан тохиолдолд нөхөн төлбөр

Энэхүү судалгаанд хамаарахгүй.

11. Оролцогчдод зориулсан удирдамж

Энэхүү судалгаанд оролцохдоо судалгаанд анхааралтай үнэн зөв хариулна уу. Судалгааны явцад асуух зүйлс байвал судлаачтай холбоо барина уу. Бид танд тайлбар мэдээлэл өгөх болно.

12. Судалгаанд оролцохоо болих

Оролцогчид судалгааны явцад хүндрэлтэй байгаа талаар гомдол гаргавал тэд хүссэн үедээ оролцоогоо цуцалж болно. Судалгааны явцад завсарлага эсвэл судалгаанаас татгалзаж болно. Энэ нь танд ямар ч сөрөг нөлөө үзүүлэхгүй. Зөвшөөрөл нь цуцлагдсан эсвэл судалгаанд хариу өгөхөө зогсоосон тохиолдолд судалгаанд оролцох таныг хасах бөгөөд цуглуулсан цаасан баримтыг бутлагчаар нэн даруй устгаж, цахим баримт бичгийг бүрмөсөн устгах болно.

13. Мэдээлэл цуглуулах, хангах

Энэхүү зөвшөөрлийн маягтанд гарын үсэг зурснаар та судалгааны баг таны хувийн (эмзэг) мэдээллийг цуглуулж, ашиглахыг зөвшөөрч байна.

- 1) Хувийн мэдээллийг цуглуулах, ашиглах зорилго
Таны хувийн мэдээллийг цуглуулах, ашиглах зорилго нь Монголын сувилагчдын халаа сэлгээнд нөлөөлж буй хүчин зүйлсийг тодорхойлох явдал юм.
- 2) Хувийн (эмзэг) мэдээллийн цуглуулах зүйлс
Таны нас, хүйс, гэр бүлийн байдал, боловсролын түвшин, ажлын байрны эргэлтийн туршлага, сарын орлого, сарын орлогод сэтгэл ханамж.
- 3) Хувийн мэдээллийг хадгалах, ашиглах хугацаа
Таны хувийн (эмзэг) мэдээллийг хадгалах, ашиглах хугацаа нь судалгаа дууссанаас хойш гурван жил байх бөгөөд дараа нь нэн даруй устгана.
- 4) Зөвшөөрөл өгөхөөс татгалзах эрхтэй бөгөөд хэрэв зөвшөөрөхөөс татгалзсаны улмаас сул тал байгаа бол сул талуудын зөвшөөрөл
Та дурдагдсан хувийн (эмзэг) цуглуулах, ашиглах, хангахыг зөвшөөрөх эсэхээ шийдэх эрхтэй, мэдээлэл, Хувийн (эмзэг) мэдээллийг цуглуулах, ашиглах, өгөх зөвшөөрөл өгөхөөс татгалзах нь танд ямар ч сөрөг үр дагаварт хүргэхгүй. Гэсэн хэдий ч зөвшөөрөл өгөхөөс татгалзах нь таны энэхүү судалгаанд оролцох эрхийг хязгаарлаж болзошгүй юм.
- 5) Судалгаагаар цуглуулсан хувийн мэдээллийг гуравдагч этгээдэд өгөх эсэх Энэхүү судалгаанд цуглуулсан хувийн (эмзэг) мэдээллийг судалгааны зорилгоос өөр зорилгоор гуравдагч этгээдэд ашиглахгүй.

14. Хувийн мэдээлэл, бүртгэлийн нууцлал

- 1) Энэхүү судалгаанд хамрагдах явцад цуглуулсан бүртгэл тань нууц байх бөгөөд судалгааны үр дүнг нууцална.
Таныг таних боломжтой бичлэгүүд нь тайланд бичигдсэн, нийтэлсэн, харласан байсан ч нууц хэвээр үлдэж, хадгалагдах болно.
- 2) Энэхүү судалгааг хянаж шалгаж байгаа хүмүүс, судалгааны хяналтын хороо, Эмнэлзүйн туршилтын хяналтын хороо гэх мэт нь таны нууцад халдахгүй. Холбогдох хууль тогтоомжийн дагуу судалгааны ажилбар, мэдээлэл найдвартай эсэхийг шалгахын тулд та үүнийг шууд үзэх боломжтой бөгөөд энэхүү зөвшөөрлийн маягтанд гарын үсэг зурснаар та эсвэл таны хууль ёсны төлөөлөгч материалыг шууд үзэх боломжтой.
- 3) Судлаачийн судалгаанд үргэлжлүүлэн оролцох шийдвэрт нөлөөлж болзошгүй шинэ мэдээлэл олж авбал судлаач тухайн сэдэвтэй цаг тухайд нь холбоо барина. Эсвэл бид таны төлөөлөгчд мэдэгдэх болно.
- 4) Судалгааны зорилгоор цуглуулсан хувийн мэдээллийг судлаач нэргүй кодчилдог тул өгөгдөлд дүн шинжилгээ хийх явцад хувь хүнийг таних боломжгүй.
Бид ийм зүйл байхгүй эсэхийг шалгах болно. Цуглуулсан мэдээллийг компьютерт хадгалахдаа баримт бичгийн нууц үгийг тохируулснаар хувийн мэдээлэл ил гарахгүй. Судалгаатай холбоотой бүртгэлийг судалгаа дууссанаас хойш 3 жилийн хугацаанд хадгалах ба компьютерийн файлуудыг бүрмөсөн устгана. Цаасан бичиг баримтыг бутлагч ашиглан устгах болно.

15. Сайн дурын байдал /оролцооноос татгалзах

Та судалгаанд оролцох зөвшөөрлөөсөө хэдийд ч татгалзаж болох ба нийм тохиолдолд таны оролцоог цуцлах бөгөөд судлаач танаас судалгаатай холбоотой нэмэлт мэдээлэл авахгүй. Хэрэв та судалгаанд оролцохгүй эсвэл ямар ч үед гарахаар шийдсэн бол танд ямар ч сул тал, алдагдал гарахгүй. Та анх авч болох үр өгөөжид ямар нэгэн сөрөг нөлөө үзүүлэхгүй. Мөн зөвшөөрлийг буцаан авах хүртэл таны мэдээллийг судалгаанд ашиглаж болох ч шинэ судалгааны мэдээлэл цуглуулахгүй.

16. Холбоо барих мэдээлэл

Үндсэн судлаач эсвэл судалгааны ажилтан судалгааны талаархи асуултад хариулна. Судалгааны хугацаанд та эсвэл таны хууль ёсны төлөөлөгч хүссэн үедээ асуулт асуух боломжтой бөгөөд асуух зүйлс байвал бидэнтэй холбоо барина уу.

Судалгааны судлаач Чинзаяа

☎ Холбоо барих: +976-8802-1506 / +82-10-9697-2265 / e-mail: boldoochinzaya@gmail.com

Хамтран судлаач : Ким Жон Хи

Судалгааны байгууллагын хаяг: Вонжу сувилахуйн коллеж, Йонсей их сургууль, 20 Илсан-ро, Вонжу-си, Ганвондо

☎ +82-33-741-0388 / Холбоо барих: +82-10-8270-6910 / и-мэйл: Kjh1290@yonsei.ac.kr

Судалгааны явцад оролцогчийн хувьд таны сайн сайхан байдал, эрхийн талаар ямар нэгэн асуулт байвал, эсвэл судалгаанд шууд оролцоггүй хэн нэгэнтэй зөвлөлдөхийг хүсвэл Байгууллагын хяналтын зөвлөлтэй дараах утсаар холбогдож болно:

Йонсей их сургуулийн Вонжу Северанс Кристиан эмнэлгийн Байгууллагын хяналт. Удирдах зөвлөл ☎ 033-741-1702~3 Йонсей их сургуулийн Вонжу Северанс Кристиан эмнэлэг Клиникийн судалгааны хамгаалалтын төвийн тусламжийн ширээ ☎ 033-741-1715

Appendix 3.1. Consent form for study (Korean)

연구대상자 동의서

연구 제목: 몽골 간호사의 이직 의도 관련요인

시험 책임자: 연세대학교 원주간호대학 진자야 (석사과정생)

- 본인은 이 설명문을 읽었으며, 본 임상연구의 목적, 방법, 기대효과, 가능한 위험성, 타 치료 방법의 유무 및 내용, 정보 관리 등에 대한 충분한 설명을 듣고 이해하였습니다.
- 모든 궁금한 사항에 대해 질문하였고, 충분한 답변을 들었습니다.
- 본 연구에 동의한 경우라도 언제든지 철회할 수 있고, 철회 이후 다른 적절한 치료를 받을 수 있음을 확인하였습니다.
- 이 연구목적으로 개인(민감)정보 수집·이용·제공 등에 관한 설명을 이해하였습니다. (아래 두 질문은 개인 정보를 다른 목적으로 제공할 경우에만 □에 V 표시가 필요하며, 해당이 없다면 해당 없음 □에 V 표시 해주시기 바랍니다.)
 - 설명문에 기술된 목적 이외의 다른 연구목적으로 귀하의 정보를 제공하는 것에 대해 동의하십니까?
☐ 해당 없음
 - 귀하의 개인(민감)정보가 제공될 때 개인 식별정보를 포함하는 것에 동의하십니까?
☐ 해당 없음
- 본인은 설명문 및 작성된 동의서 사본 1부를 받았습니다.
- 충분한 시간을 갖고 생각한 결과, 본인은 이 연구에 참여하기를 자유로운 의사에 따라 동의합니다.

나는 위의 사항을 모두 인지하고 동의합니다. (이 부분에 체크 필요) ☐ 예

▶ 각 관계자 1명만 기입하되 만 19세 미만의 미성년의 경우 본인을 포함 법정대리인 서명 필요

대상자와의 관계	성명	자필서명	서명일(YYYY/MM/DD)
본인			
대리인	대상자와의 관계: 대리인 서명 사유:		
참관인(필요시)	참관인 서명 사유:		

연구자	성명	자필서명	서명일(YYYY/MM/DD)

※ 본 동의서는 책임연구자 또는 책임연구자의 위임을 받고 IRB에 승인받은 연구자만 서명할 수 있습니다. (본 문구가 삭제되어서는 안됩니다.)

※ 본 동의서는 우측 상단에 연구심의위원회 승인 직인이 있는 경우에만 유효합니다.

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Appendix 3.2. Consent form for study (Mongolian)

[W5CH] 표준 권고 연구대상자 설명문 및 동의서 [임상연구]

원주세브란스기독병원
Wonju Sebelles Christian Hospital

Судалгааны сэдвийн зөвшөөрлийн маягт

Гарчиг: Монгол дахь сувиллагчийн халаа сэлгээнд хамаарах хүчин зүйлс

Судалгааны судлаач: Ёнсей их сургуулийн Вонжу сувиллахуйн коллеж, Чингэяа
(Магистрын хөтөлбөрийн оюутан)

1. Би энэхүү тайлбарыг уншвал зорилго, арга, хүлээгдэж буй үр нөлөө, болзошгүй эрсдэл, бусад эмчилгээний аргуудын байгаа эсэх, агуулга, мэдээллийн менежмент гэх мэтийг хүлээн авч ойлгосон.
2. Миний бүх асуултыг асууж, наадал бүрэн хариулсан.
3. Та энэхүү судалгааг зөвшөөрсөн ч хүссэн үедээ татгалзаж, татгалзсаны дараа өөр тохирох эмчилгээ хийлгэж болно.
4. Энэхүү судалгаанд бид хувийн (эмзэг) мэдээллийг цуглуулах, ашиглах, хангах тайлбарыг ойлгосон. (Дараах хоёр асуултын хувьд хэрэв та өөр зорилгоор хувийн мэдээллээ өгсөн бол □ дээр V тэмдэг тавих шаардлагатай бөгөөд хэрэв үгүй бол "Хэрэглэх боломжгүй" хэсэгт V тэмдэгтэй үгүй.)

① Та мэдээлэл дурасянаас бусад судалгааны зорилгоор мэдээлэл өгөхийг зөвшөөрч байна уу?

☐ үгүй

② Таны хувийн (эмзэг) мэдээлэл өгөх үед таны хувийн мэдээллийг оруулахыг зөвшөөрч байна уу?

☐ үгүй

5. Тайлбарын хуудас болон бичсэн зөвшөөрлийн хуудасны нэг хувийг хүлээн авлаа.

6. Хяналттай цаг гаргаж, бодсоны эцэст би энэхүү

Би дээрх бүх зүйлийг хүлээн зөвшөөрч, зөвшөөрч байна. (Энэ хэсгийг шалгах шаардлагатай)

☐ тийм

► Хүн тус бүрийг зөвхөн нэг хүн бөглөх ёстой бөгөөд 19 нас хүрээгүй тохиолдолд хууль ёсны төлөөлөгч, түүний дотор тухайн хүн өөрөө гарын үсэг зурах шаардлагатай.

Судлах сэдвүүд	Зорилготой оролцогчидтой харилцах харилцаа	Нэр	Гараар бичсэн гарын үсэг	Гарын үсэг зурсан огноо (YYYY/MM/DD)
	Таны			
	Агент	Зорилготой үзэгчидтэй харилцах харилцаа: Төлөөлөгчид гарын үсэг зурах шалтгаанууд:		
	Ажиглагчид (шаардлагатай бол)			
		Ажиглагч гарын үсэг зурсан шалтгаанууд:		

Судлаач	Нэр	Гараар бичсэн гарын үсэг	Гарын үсэг зурсан огноо (YYYY/MM/DD)

※ Энэхүү зөвшөөрлийн маягт дээр зөвхөн ерөнхий мөрдөн байцаагчийн захиалга авч, IRB-ээр батлагдсан ерөнхий мөрдөн байцаагч эсвэл судлаач гарын үсэг зурж болно. (Энэ хэлтэгийг хасч болохгүй.)

※Энэхүү зөвшөөрлийн маягт нь баруун дээд буланд Судалгааны хяналтын зөвлөлийн зөвшөөрлийн тамгатай тохиолдолд л хүчинтэй.

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Appendix 4. Instrument

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Санал асуулт

I. Ерөнхий шинж чанар

Дараах асуултуудад таны санаатай хамгийн сайн тохирох зайд (✓) тэмдэглэж, банкинд тодорхой хэсгийг нэмж оруулна уу.

1. Нас
.....
2. Хүйс
① эрэгтэй ② эмэгтэй
3. Гэрлэлтийн байдал
① гэрлээгүй ② гэрэлсэн ③ салсан ④ бусад ()
4. Боловсролын түвшин
① диплом ② бакалавр ③ магистр болон түүнээс дээш
5. Сувилагчаар ажилласан жил
.....
6. Одоо ажиллаж байгаа тасгийн ажилласан жил
.....
7. Танд өмнө нь ахлах сувилагчаар ажиллаж байсан туршлага байгаа юу?
① тийм ② үгүй
8. Та өмнө ажлаа сольж байсан уу?
① тийм ② үгүй
- Хэрэв та (1)-г сонговол гарах хугацаа (.....сар) бичнэ үү.
9. Одоо ажиллаж байгаа тасаг
① ерөнхий тасаг ② хагалгааны тасаг ③ эрчимтийн тасаг
④ яаралтай тусламжийн тасаг ⑤ бусад ()
10. Сарын цалин (бичнэ үү)
.....(төгрөг)
11. Одоо авч байгаа цалиндаа сэтгэл хангалуун байдаг уу?
① үнэхээр сэтгэл хангалуун ② хангалуун ③ дунд зэрэг
④ хангалуун биш ⑤ үнэхээр хангалуун биш
12. Таны ажлын сэтгэл ханамж
① үнэхээр сэтгэл хангалуун ② хангалуун ③ дунд зэрэг
④ хангалуун биш ⑤ үнэхээр хангалуун биш
13. Таны ажлын цагийн төрөл
① ерөнхий сувилагч ② ээлжийн сувилагч
14. Сүүлийн 7 хоногт ажилласан цагийн хуваарь

Ядралт

Асуулт		Огт үгүй	Ховор	Хааяа	Иснэгд	Байнга
Хувь хүнтэй холбоотой ядралт						
1	Та ажилдаа ядардаг уу?					
2	Танд бие махбодийн хувьд туйлдаж, тамирдах үе гардаг уу?					
3	Танд сэтгэл санааны хувьд туйлдах үе хэр их гардаг вэ?					
4	"Цаашид тэсэхгүй нь" гэж танд бодогдох үе хэр их байсан бэ?					
5	Та хэр өвчлөмтгий вэ?					
Ажилтай холбоотой ядралт						
6	Таны ажил сэтгэл зүйн хувьд ачаалал ихтэй байдаг уу?					
7	Танд ажлаасаа халшрах үе хэр их гардаг вэ?					
8	Ажлаасаа болж сэтгэл гонсойх үе байдаг уу?					
9	Та долоо хоногийн сүүлээр эцэж туйлдсанаа мэдэрдэг үү?					
10	Та ажлынхаа өглөөд дараагийн ажлын өдрийн тухай бодож халширдаг уу ?					
11	Ажлын цаг мөч бүр таныг ядрааж байгаа мэт санагддаг уу?					
12	Чөлөөт цагаараа гэр бүлийнхэн, найз нөхөддөө зориулах хангалттай хүч энерги танд байдаг уу?					
Үйлчлүүлэгчтэй холбоотой ядралт						
13	Үйлчлүүлэгчтэй ажиллах нь хүнд хэцүү санагддаг уу?					
14	Үйлчлүүлэгчтэй ажиллахад урам хугарч, гонсойдог уу ?					
15	Үйлчлүүлэгчтэй ажиллахад таны хүч, энергийг сорж байгаа мэт санагддаг уу?					
16	Та үйлчлүүлэгчтэй ажиллахаас ядарч байна уу?					
17	Танд эдгээр үйлчлүүлэгчидтэй хэдий болтол ингэж ажиллах билээ гэж цөхрөх үе гардаг уу?					

Ажил урлахуй

Асуулт		Хэзээ ч үгүй	Ховор	Хааяа	Байнга	Маш олон удаа	Үргэлж
Даалгавар урлах							
1	Ажлаа сайжруулах шинэ арга барилыг бий болгодог						
2	Ажил дээрээ ажиллаж байгаа ажлынхаа цар хүрээ, төрлийг өөрчилдөг						
3	Өөрийн ур чадварт, илүү сайн тохирох шинэ ажил сонгодог						
4	Ажил дээрээ нэмэлт ажил хийхээр сонгодог						
5	Өөрийн ур чадвар, ашиг тустай ажлын даалгаврыг илүүд үздэг						
6	Өөртөө илүү цаг гаргахын тулд хийх арга барилаа өөрчилдөг						
7	Бүтээмжгүй гэж үзсэн жижигг процедурыг өөрчилдөг						
Танин мэдэхүйн урлал							
8	Таны ажил амьдралын зорилгоо хэрхэн хэрэгжүүлэх талаар бодож үздэг						
9	Байгууллагын амжилтад таны ажил ямар ач холбогдолтой болохыг өөртөө сануулдаг						
10	Та ажлын ач холбогдлыг олон нийтэд сануулдаг						
11	Таны ажил амьдралд тань зэрэгээр нөлөөлөх арга замуудын талаар боддог						
12	Таны ерөнхий сайн сайхан байдлын талаар ямар ажил хийхээр байгаагаа эргэцүүлэн боддог						
Харилцааны урлал							
13	Илүү олон харилцаа тогтоохын тулд олон нийтийн үйл ажиллагаанд оролцдог						
14	Ажил дээрээ хүмүүстэй сайн танилцахыг хичээдэг						
15	Ажилтай холбоотой нийгмийн ажил зохион байгуулахад оролцдог						
16	Ажлын байранд онцгой арга хэрэгсэл зохион байгуулдаг (жишээ нь, хамт ажиллагсдын төрсөн өдрөөр)						
17	Хамтран ажиллагсад, харилцагчид эсвэл үйлчлүүлэгчиддээ өөрийгөө танилцуулдаг						
18	Шинэ ажилчдыг зөвлөхөөр сонгох (албан ёсны болон албан бусаар)						
19	Ажил дээрээ ур чадвар, нэг сонирхолтой хүмүүстэй найзууд болдог						

Сувилахуйн ажлын орчин

Асуулт		Санал огт ийлэхгүй	Бага зэрэг санал ийлэхгүй байна	Бага зэрэг санал ийлж байна	Маш их санал ийлж байна
Эмнэлгийн асуудалд сувилагчийн оролцоо					
1	Эмнэлгийн дотоод удирдлагад сувилагч нар оролцдог				
2	Бодлогын шийдвэр гаргахад ажилтан сувилагч оролцох боломж бий				
3	Сувилахуйн боловсон хүчнийг ахиулах янз бүрийн боломжууд байдаг				
4	Манайд ажилчдын санал хүсэлтийг сонсож, хариу өгдөг захиргааны хэлтэс байдаг				
5	Ажилчдад байнга харагддаг, ойртоход хялбар сувилахуйн захирал байдаг				
6	Ажил мэргэжлийн хөгжил/эмнэлзүйн дэвшлийн боломжууд байдаг				
7	Сувилахуйн администраторууд ердийн асуудал, журмын талаар ажилтнуудтай зөвлөлддөг				
8	Сувилагчдад эмнэлэг, сувилахуйн тасгийн хороонд ажиллах боломжийг олгодог				
9	Эмнэлгийн бусад удирдах албан тушаалтнуудтай адил эрх мэдэл, эрх мэдэл бүхий дээд зэргийн сувилахуйн ажилтан байдаг				
Сувилахуйн тусламж үйлчилгээний чанарын сан					
10	Сувилахуйн оношийг ашиглах				
11	Чанарын баталгаажуулалтын идэвхтэй хөтөлбөртэй				
12	Шинээр ажилд орсон сувилагч нарт зориулсан прецептор хөтөлбөр байдаг				
13	Сувилахуй нь эмнэлгийн загварт бус сувилахуйн загварт суурилдаг				
14	Эмчилгээний тасралтгүй байдлыг нэмэгдүүлэхийн тулд өвчтөний халамжийн үүрэг хариуцлагыг зохион байгуулдаг бөгөөд энэ нь нэг сувилагч өвчтөнийг нэг өдрөөс нөгөөд нь асрах гэсэн үг юм				
15	Өвчтөний асрамжийн орчинд нэвт шингэсэн сувилахуйн тодорхой философи байдаг				
16	Бүх өвчтөнд зориулж бичсэн, сүүлийн үеийн тусламж үйлчилгээний төлөвлөгөө байдаг				
17	Захиргаа сувилахуйн тусламж үйлчилгээний өндөр стандартыг хүлээж байна				
18	Сувилагчдад зориулсан дотоод сургалт, тасралтгүй боловсролын хөтөлбөр идэвхтэй явагдаж байна				
19	Эмнэлзүйн орчинд чадварлаг сувилагч нартай хамтран ажилдаг				


Асуулт		Самал огт нийлэхгүй	Бага зэрэг самал нийлэхгүй байна	Бага зэрэг самал нийлж байна	Маш их самал нийлж байна
Эмнэлзүйн ур чадвартай сувилагч нартай ажиллах					
20	Манайд сайн менежер, манлайлагч ахлах сувилагч бий				
21	Эмч, сувилахуйн ажилтнуудын хооронд зөрчилдөөн гарсан ч шийдвэр гаргахад сувилахуйн ажилтнуудад дэмжлэг үзүүлдэг /ахлах сувилагч/захирал				
22	Удирдагч нар алдааг шүүмжлэх биш суралцах боломж болгон ашигладаг				
23	Сувилагчдыг дэмждэг хяналтын ажилтантай				
24	Сайн хийсэн ажлыг магтаж, үнэлдэг				
Боловсон хүчин, нөөцийн хүрэлцээ					
25	Ажлаа дуусгах хангалттай боловсон хүчин(сувилагч) бий				
26	Өндөр чанартай тусламж үзүүлэхийн тулд хангалттай бүртгэлтэй сувилагч нар байдаг				
27	Тусламжийн өргөн үйлчилгээ нь өвчтөнтэйгээ цагийг өнгөрөөх боломжийг танд олгоно				
28	Бусад сувилагч нартай өвчтөний асаргаа сувилагчаны асуудлыг хэлэлцэх хангалттай цаг, боломж бий				
Сувилагч, эмч нарын хамтын харилцаа					
29	Сувилагч, эмч нарын хооронд багаар ажиллах чадвар маш их				
30	Эмч, сувилагч нарын харилцаа сайн байна				
31	Сувилагч, эмч нарын хооронд функциональ хамтын ажиллагаа (хамтарсан дадлага) байдаг				

Ажлаас гарах хүсэл

Асуулт	санал огт нийлэхгүй	санал нийлэхгүй байна	зарим нь санал нийлэхгүй байна	санал нийлэх ч үгүй	зарим нь санал нийлэх юм	санал нийлэх байна	маш их санал нийлж байна
1 Би албан тушаалдаа хэсэг хугацаанд үлдэхээр төлөвлөж байна							
2 Би ойрын ирээдүйд албан тушаалаа орхино гэдэгт итгэлтэй байна							
3 Албан тушаалдаа үлдэх эсвэл орхихоор шийдвэр гаргах нь одоогоор миний хувьд чухал асуудал биш юм							
4 Би энэ байгууллагаас гарах эсэхээ мэдэж байна. Богино хугацаанд							
5 Хэрэв маргааш өөр ажил санал ирвэл би үүнийг нухацтай авч үзэх болно							
6 Би одоогийн албан тушаалаа орхих бодолгүй байна							
7 Би өөрийнхөө албан тушаалд хүссэн хэмжээгээрээ байсан							
8 Би энд хэсэг хугацаанд үлдэх болно гэдэгт итгэлтэй байна							
9 Би одоо ажиллаж байгаа байгууллагатаа хэр удаан үлдэх талаар тодохрой ойлголтгүй байна							
10 Би энэ ажлыг хэсэг хугацаанд хийхээр төлөвлөж байна							
11 Би үнэхээр энэ байгууллагат үлдэх үү, үгүй юу гэсэн том эргэлзээ төрж байна							
12 Би удахгүй энэ албан тушаалаа орхихоор төлөвлөж байна							

Appendix 5. Authorization for use of research instruments

5.1 Permission to use the burnout instrument




Chinzaya zaya <boldoochinzaya@gmail.com>
to tsk@task-consult.dk ▾

Feb 5, 2024, 5:24 PM ☆ 😊 ↶ ⋮

Dear professor

My name's Chinzaya Boldoo from Mongolia, Now I'm studying a master's course student, Department of Nursing, Graduate School of Yonsei University, South Korea.
I'm preparing my master's thesis. My thesis topic is "Associated factors on nurses' turnover intention in Mongolia".
I want to use your Copenhagen Burnout Inventory (CBI)
Could you permit for me to use the CBI.

Chinzaya Boldoo
Scrub nurse
Surgery Department
Brilliant hospital
Nam Yan Ju street, Bayanzurkh district, 18th khoroo
Ulaanbaatar, Mongolia 13336



Tage Søndergård Kristensen
to me ▾


Feb 14, 2024, 9:40 PM ☆ 😊 ↶ ⋮

Dear Chinzaya Boldoo,

Thank you for your mail and for your interest in the CBI.
The questionnaire is in public domain and free to be used by all.
I enclose some material that might be of interest to you.

All the best,

Tage S Kristensen



Chinzaya zaya <boldoochinzaya@gmail.com>
to sugarmaa ▾

Nov 20, 2023, 10:47 AM ☆ 😊 ↶ ⋮

Сайн байна уу багшаа. Миний мэйл харагдаагүй байж магадгүй гээд дахин мэйл бичиж байна. Та зав гаргавал надад хариу өгөх боломж байна уу? Би өөрийн судалгааны төсөлд Copenhagen Burnout Inventory (CBI) ашиглах таны зөвшөөрлийг авч, судалгаандаа ашиглахыг хүсч байна.

Хүндэтгэсэн
Chinzaya Boldoo
Scrub nurse
Surgery Department
Brilliant hospital
Nam Yan Ju street, Bayanzurkh district, 18th khoroo
Ulaanbaatar, Mongolia 13336



Sugarmaa Myagmarjav <sugarmaa@mnums.edu.mn>

to me ▾

Fri, Dec 1, 2023, 3:29 PM ☆ 😊 ↶ ⋮

 Translate to English

X

Сайн байна уу,

Мэйд хариулалгүй удсанд уучлаарай. Би анкетаа ажил дээрх хуучин компьютерт байгаа болохоор орж авна гэж бодож хойшлуулаад тэр чигтээ мартжээ. Уучлаарай. Дахиад сайн уншихаар чамд анкет байсан байж болохоор юм байна. Ямар ч гэсэн энэ мэйлээр илгээж байна.

Ашиглахыг зөвшөөрнөө. Харин чи яаж боловсруулахыг мэдэх болов уу. Тайлан дээр дэлгэрэнгүй байгаа.

Амжилт хүсье,

Сугармаа

Associate professor Sugarmaa Myagmarjav, PhD, MD

Head of the Department of Health Social Work and Social Sciences,

School of Public Health,

Mongolian National University of Medical Sciences

One attachment • Scanned by Gmail



5.2 Permission to use job crafting instrument

Permission to use Job Crafting Instrument Inbox x



Chinzaya zaya <boldoochinzaya@gmail.com>
to gavin.slemp ▾

Dec 1, 2023, 12:09 PM ☆ ☹ ↶ ⋮

Dear Professor Gavin

I am writing to request permission to use The Job Crafting Questionnaire in my research project titled "Influencing factors on nurses' turnover intention in Mongolia". My name is Chinzaya Boldoo, and I am a master's student of nursing at Yonsei University in South Korea.

After reading your research on job crafting, I believe that The Job Crafting Questionnaire would be a valuable addition to my study, which aims to identify the factors influencing nurses' turnover intention in Mongolia.

I plan to use The Job Crafting Questionnaire as [a primary data collection tool/supplement other measures/other purpose]. The questionnaire will be translated into Mongolian for my target audience. I assure you that The Job Crafting Questionnaire will be used solely for research purposes and not for commercial gain.

If you grant me permission to use The Job Crafting Questionnaire, I will ensure that the questionnaire is used only by me and my research team and that the results of my research are made available to you upon request.

Thank you for considering my request. I look forward to hearing from you.

Sincerely,

Chinzaya Boldoo

Chinzaya Boldoo

Scrub nurse

Surgery Department

Brilliant hospital

Nam Yan Ju street, Bayanzurkh district, 18th khoroo



Gavin Slemp <gavin.slemp@unimelb.edu.au>
to me ▾

Dec 1, 2023, 12:30 PM ☆ ☹ ↶ ⋮

That's fine.

Cheers

Gavin

On 1 Dec 2023, at 2:09 pm, Chinzaya zaya <boldoochinzaya@gmail.com> wrote:

External email: Please exercise caution

...

 **Chinzaya zaya** <boldoochinzaya@gmail.com> Mon, Feb 5, 6:03 PM (2 days ago) ☆ 😊 ↩
to amyw@wharton.upenn.edu ▼

Dear Professor Amy Wrzesniewski

My name's Chinzaya Boldoo from Mongolia, Now I'm studying a master's course student, Department of Nursing, Graduate School of Yonsei University, South Korea.
I'm preparing my master's thesis. My thesis topic is "Associated factors on nurses' turnover intention in Mongolia".
I want to use your Job Crafting Questionnaire
Could you permit me to use the Job Crafting Questionnaire.
Thank you for your spending time.

Sincerely,
Chinzaya Boldoo

 **Wrzesniewski, Amy** Mon, Feb 5, 8:26 PM (2 days ago) ☆ 😊 ↩ ⋮
to me ▼

Dear Chinzaya,

You absolutely have my permission and you'll find the attached document helpful in your efforts. I just ask that you cite the measure you use in whatever you write from your research. Wishing you all the best with your study!

Best,
Amy

One attachment • Scanned by Gmail ⓘ



5.3 Permission to use the nursing work environment instrument

Permission to use Practice Environment Scale of Nursing Work Index Inbox x



Chinzaya zaya <boldoochinzaya@gmail.com>
to elake ▾

Mon, Jan 22, 9:08 PM ☆ 😊 ↶ ⋮

Dear Professor Eileen T.Lake

My name is Chinzaya Boldoo, and I am a master's student of nursing at Yonsei University Wonju College of Nursing in South Korea. Currently, I am conducting research on the influencing factors on nurses' turnover intention in Mongolia.

I am impressed with your research on the Practice Environment Scale of Nursing Work Index (PES-NWI), particularly its construct validity and reliability among nurses. I am writing to request your permission to use the PES-NWI in my study to assess the practice environment for nurses in Mongolia. I plan to translate the instrument into Mongolian for my target audience.

I assure you that the instrument will be used solely for research purposes and will not be utilized for commercial gain

Thank you for considering my request. I look forward to hearing from you.

Sincerely,

Chinzaya Boldoo



Barol, Andrea L. <ajb@nursing.upenn.edu>
to me ▾

Feb 5, 2024, 11:14 PM (2 days ago) ☆ 😊 ↶ ⋮

Dear Chinzaya Boldoo,

Thank you for your email to Dr. Lake. Enclosed, please find the instrument, scoring instructions, an article containing PES-NWI scores for ANCC Magnet hospitals from 1998 in Table 1, and a Warshawsky & Haven article you may find useful. These materials are sent to everyone who makes the request.

Dr. Lake's permission is not needed as the instrument is in the public domain due to its endorsement by the National Quality Forum most recently in December 2022, having been endorsed continuously since 2004 (<http://www.qualityforum.org/QPS/QPSTool.aspx?m=1129&e=3>). However, if you prefer to have Dr. Lake's permission, this email serves as her permission.

Please direct any reply to Dr. Eileen Lake at elake@nursing.upenn.edu. If you need anything else, feel free to write to us again.

All the best,

Andrea Barol

Research Center Coordinator

Center for Health Outcomes and Policy Research

University of Pennsylvania School of Nursing

5.4 Permission to use the turnover intention instrument

Permission to use Anticipated Turnover Scale (ATS) Inbox x



Chinzaya zaya <boldoochinzaya@gmail.com>

Fri, Dec 1, 2023, 1:54 PM ☆ 😊 ↩ ⋮

to atwoodj ▾

Dear Professor Atwood,

My name is Chinzaya Boldoo, and I am a master's student of nursing at Yonsei University in South Korea. I am writing to request permission to use the Anticipated Turnover Scale (ATS) that you developed for my research project titled "Associated factors on nurses' turnover intention in Mongolia." I have read your research on the development of a shortened version. I plan to translate the instrument into Mongolian to ensure that it is appropriately adapted to my target audience. I assure you that the ATS will be used solely for research purposes and not for commercial gain. If you grant me permission to use the ATS, I will ensure that the instrument is used only by me and my research team and that the results of my research are made available to you upon request.

Thank you for your time, and I look forward to your response.

Sincerely,

Chinzaya Boldoo



JAN ATWOOD <atwoodj@comcast.net>

Sat, Dec 2, 2023, 1:30 AM ☆ 😊 ↩ ⋮

to ahinshaw@umich.edu, me ▾

Dear Masters Student Boldoo,

Dr. Hinshaw and I are happy to give you permission to use the Anticipated Turnover Scale for your project. In a few days please expect a copy of the scale and associated materials.

Sincerely,

Jan R. Atwood, PhD, Nurse Practitioner, Professor Emerita

국문 요약

배경: 간호사 이직 의도의 증가는 몽골을 포함한 전 세계 의료 시스템에서 주요한 문제로 대두되고 있다. 병원 내에 간호사는 필수 의료서비스 제공 및 의료의 질 향상에 중요한 역할을 한다. 그럼에도 불구하고, 몽골의 간호사 비율은 세계보건기구가 권장하는 최소치보다 낮으며, 간호 인력이 크게 부족한 편이다. 간호사의 높은 이직률에 영향을 미치는 요인으로서는 과중한 업무량, 낮은 임금, 사회적 스트레스, 낮은 직무 만족도 등이 있다. 높은 이직 의도는 환자의 건강상태 및 의료 기관에 재정적 부담을 주기 때문에 몽골 간호사의 이직 의도 관련 요인을 파악할 필요가 있다.

목적: 본 연구는 몽골 간호사의 이직 의도에 영향을 미치는 요인인 번아웃, 잡크래프팅, 간호업무환경을 확인하고자 하였다.

방법: 몽골 울란바토르 소재 3차 병원 간호사를 대상으로 횡단적 조사 연구를 실시하였다. G*Power로 산출된 표본 크기를 이용하여 State Second Central Hospital과 Brilliant Hospital에서 123명의 간호사를 모집하였다. 일반적 특성, 번아웃, 잡크래프팅, 간호업무환경, 이직 의도에 대한 93개 문항으로 구성된 구조화된 설문조사를 이용하여 자료를 수집하였다. 통계 분석은 SPSS 25.0 프로그램을 이용하여 기술 통계, t-test, 일원분산분석, Pearson 상관관계, 다중 회귀 분석을 수행하였다.

결과: 간호업무환경과 번아웃은 간호사의 이직 의도와 유의한 관련성이 있었다. 간호업무환경이 열악할수록, 번아웃이 높을수록 이직 의도가 큰 것으로 나타났다. 잡 크래프팅은 간호사의 이직 의도와 유의한 관련성은 없었다.

결론: 본 연구는 간호 업무 환경과 번아웃이 몽골의 간호사 이직 의도를 줄이는 주요 요인으로 확인되었다. 따라서 인력 수준과 자원을 개선하는 것이 몽골의 간호 업무 환경을 개선하는 데 필요하며, 번아웃을 줄이는 것을 목표로 한 중재도 필요하다는 것을 확인하였다. 이는, 몽골 간호사의 근무 여건을 개선하기 위한 적절한 중재의 필요성을 강조하며, 궁극적으로 이직률을 낮추고 의료시스템의 안정성과 질을 높이는 것에 기여할 것이다.

주제어: 간호사, 이직 의도, 번아웃, 간호업무환경, 잡 크래프팅, 몽골