Effects of Work-Life Balance on the Turnover Intention of Nurses Compared to Paid Female Workers

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Abstract: Background/Objectives: The purpose of this study is to highlight the work-life balance issues of nurses compared to paid female workers, and to analyze the impact of work-life conflicts on job turnover intentions. Methods/Statistical analysis: Survey data for hospital nurses and large-scale national surveys are used for analysis. The level of work-life balance of nurses is compared with that of full-time paid female workers. Multivariate logistic regression analysis with controlled covariates is performed by nurse group and paid female worker group, respectively. Findings: The turnover intention of the respondents is 67.1% among the nurses and 2.8% of the paid female workers. Work-life conflict level is higher in nurses than in paid female workers. As a result of multivariate logistic regression analysis, paid female workers increase their turnover intentions by the following two factors: (1) a low level of positive impact on work and (2) a low level of positive impact on work. In addition to (1) and (2), the following (3) factors increase the turnover intention of the nurse: (3) a high level of negative impact on work. The possible explanation for the result is that the turnover intention of the nurse is indirectly influenced by a small positive influence between work and family, and it is directly influenced by the negative influence between work and family. Improvements/Applications: The results provide a clue that it is possible to improve nurses' turnover intention through work-life reconciliation, which is an unknown factor affecting nurses' turnover intention.

Keywords: Work-life balance, Turn-over intention, Nurse, Female worker, Group comparison

I. INTRODUCTION

Work-life conflicts are a kind of role conflict that arises when roles played in the workplace and in the home are incompatible. Work-life conflicts arise when a person is forced to play an incompatible role in the home and workplace [1] [2]. The problems that work and life experience are usually focused on women. Women are often required to play multiple roles in the home, and in major aspects of life such as marriage, childbirth and childcare, women are required to play many roles in the home [3]. In recent years, the severity of the problem along with the increase of paid female workers is considered a major social problem for many women.

Nurses are one of the leading female professions, according to research, and work characteristics that require professional and high intensity add to work-life conflicts [4] [5].

According to the preceding study of nurses, the greater the conflict between work-life compatibility, the greater the number of work stress, the greater the presentation, the decrease in performance, and the decrease in job satisfaction, the higher the turnover [4] [6] [7] [8] [9]. A nurse's work-family balance, like a typical female worker, has an important impact on individual work and family satisfaction, and also affects the continuation and performance of professional activities.

Frequent turnover or high turnover increases the likelihood that individuals will lose opportunities for personal development and self-realization, at the hospital level, the additional cost of personnel turnover, and the adverse health effects of experienced workers also result in poor quality [3] [10]. Efforts will be needed to find out what relevant mediated factors are to effectively respond to nurse turnover issues. According to a systematic study of factors related to the turnover of hospital nurses, there were many factors related to turnover in the study that identified demographic factors (age, economic level, household type, etc.) and the nature of work (shift service, hours) [11]. Socio-demographic factors are less likely to intervene, and the task characteristics (shifts, high work intensity, professional demands, and etc.) are associated with structural aspects, making them difficult to change in the short term. There have been limited studies that have shown that balancing role conflicts between working and home can be an important means of motivating women to work and preventing the transfer of talented people, just like pay and promotion [3] [2]. It is necessary to examine the impact of role balancing as a variable factor to reduce the turnover intention.

To determine the consistency of the results of the studies presented above, the turnover scale (1–5 points) of Lawler (1993) was presented as a dependent variable in order to conduct a sensitivity analysis only to the nurses. After controlling the other factors analyzed for nurses, each point in the work-life compatibility conflict increased the turnover scale by 0.38 (β=0.38, p=<.001). This was consistent with the turnover measured in different ways with the same propensity as the proposed results.

There is a lack of research that deals with the seriousness and impact of nurses' work-to-family conflict compared to typical paid female forces. And also there have been some studies on these issues within the nurses' group,

but the research that investigates the severity and the extent of the problems through group comparison is limited. The purpose of this study is to investigate the work-life balance issues of nurses compared to paid female workers, and to analyze nurses the work-life conflicts' effect on job turnover intentions.

II. MATERIALS AND METHODS

2.1. Research design

This study is a descriptive cross-sectional survey of the relevance of work-life conflicts between nurses and paid female workers working in general hospitals and the degree of turnover.

2.2. Materials

The questionnaires of nurses were extracted from the convenience nurses who worked for more than 3 months in five advanced general hospitals. 438 of the total 440 copies were recovered. Korean longitudinal survey of women and families (KLoWF) is an adult woman surveyed every two years and examines family, work and everyday life. We use the data of 2015 KLoWF and the survey data of nurses.

In order to increase the likelihood of comparability, (1) the same questionnaire was constructed, (2) paid female workers who graduated from college or higher were excluded, and (3) those older than 55 years were excluded.

2.3. Methods

2.3.1. Measurements

The main independent variable 'work-life balance conflict' is developed by the KLoWF research team [12]. The Likert scale measures the positive and negative aspects of the family's influence on work and family life. The dependent variable (turnover intention) was to ask participants if they were willing to transfer to another employment in the future, and to respond positively and negatively. This question was adopted by the KLoWF and used it as a question to evaluate paid workers' intention to change jobs. Control variables were general characteristics (age, marriage status, education level), mental health status (stress level), and working condition (working hours).

2.3.2. Statistics analysis

In the analysis method, nurse questionnaire data and the KLoWF data were analyzed in parallel, and the characteristics of the two groups were compared. Using the collected data, internal agreement is measured for the independent variables to verify reliability and the dependent variables were reliable beyond the Cronbach's a value of 0.7 [Supplementary Table

1]. Univariate analysis was made on the relationship between work-life conflict level and turnover intention. After controlling the control variables, multivariate logistic regression analysis was conducted to examine the effect of work-life conflict on turnover intention. Statistical analyses were conducted using the Stata (ver. 15) software.

III. RESULTS AND DISCUSSION

The total number of samples is 1,066; 633 paid female workers and 433 nurses. 67.1% of nurses and 2.8% of paid female workers responded that they had willingness to turnover. The percentage of nurses who are willing to change jobs was about 24 times higher than that of paid female workers. The Socio-demographic factors of nurses and paid female workers are as follows: Average age was 38.1±8.3 in paid female worker group and 33.1±7.3 in nurse group. The marriage status was 66.3 percent among paid female workers and 46.6 percent among nurses. The education level was 53.4 percent of paid female workers, 58.3 percent of nurses, 8.4 percent of paid female workers and 18.1 percent of nurses, respectively. The stress level measured for mental health was 2.07±0.01 for paid female workers and 2.37±0.02 for nurses, which was higher for nurses.

The analysis result of the univariate analysis by dividing the level of work-life conflicts into four areas: (1) The positive impact from workplace to home (work → family: positive impact) was 2.02±0.02 for paid female workers and 2.31±0.03 for nurses, higher for nurses. (2) The negative impact from workplace to home (work → family: negative impact) was 1.83±0.02 in paid female workers and 2.83±0.04 in nurses, higher in nurses. (3) The positive effect of working in the home (family → work: positive impact) was 1.69±0.02 for paid female workers and 2.20±0.04 for nurses, which was higher for nurses. (4) The negative impact on the workplace at home (family → work: negative impact) was 2.29±0.02 for paid female workers and 2.28±0.03 for nurses. The last area was not a statistically significant difference unlike other areas [Table 1].

Table 1. Characteristics of Respondents

		Paid female workers (n=633)		Nurses (n=433)		
		n (%)	M±SD	n (%)	M±SD	p-value
Socio-demographic factors						
Age	mean±SD		38.1±8.3		33.1±7.3	<.001
Age groups	23~29	123 (19.5)		172 (39.7)		<.001
	30~39	227 (35.9)		170 (39.3)		
	40~55	282 (44.5)		91 (21)		

Marriage	No	213 (33.7)	231 (53.4)	<.001
	Yes	420 (66.3)	202 (46.6)	
Education	College	242 (38.3)	102 (23.6)	<.001
	Bachelor	338 (53.4)	252 (58.3)	
	≥ Masters	53 (8.4)	78 (18.1)	
Mental health status				
Stress level		2.07±0.01	2.37±0.02	<.001
Working condition				
Working hours	(Unit: hours)	7.89±1.47	9.90±2.66	<.001
Work-life conflicts				
work → family	(Positive impact)	2.02±0.02	2.31±0.03	<.001
	(Negative impact)	1.83±0.02	2.83±0.04	<.001
family → work	(Positive impact)	1.69±0.02	2.20±0.04	<.001
	(Negative impact)	2.29±0.02	2.28±0.03	0.08
Turnover intention	No	615(97.2)	142(32.9)	<.001
	Yes	18 (2.8)	291(67.1)	

The impact of work-life conflicts on the intention of nurses and paid female workers in the final model (multivariate logistic regression analysis) of controlling social and mental health factors is shown in Table 2. In paid female workers, the higher the positive effects of the work-to-family, the less the intention of turnover (OR=0.297; 95% CI=0.098-0.903), and the higher the negative effects of the family-to-work, the greater the intention of turnover (OR=2.710; 95% CI=1.229-5.980). Other work-life conflicts in paid female workers had no significant relevance.

In nurses, the higher the positive effects of the work-to-family, the greater the intention of turnover (OR=2.020; 95% CI=1.239-3.297), and the higher the negative effects of the family-to-work, the greater the intention of turnover (OR=1.601; 95% CI=1.163-2.205). The higher the negative effects of the family-to-work, the greater the nurses' intention of turnover (OR=1.845; 95% CI=1.175-2.899). The positive effects of the family-to-work were not relevant to the nurses' intention of turnover. It was characterized by an increase in the intention of changing jobs even if the nurses responded that there was a positive effect from work-to-family unlike paid female workers. The results can be interpreted that the greater the impact of family from work, regardless of whether it is positive or negative, the more nurses think of turnover. As such, their role in the workplace negatively affects their family life [Table 2].

The final analysis model described 1.3 percent for paid female workers and 17.5 percent for nurses. The cause of the work-life conflict can be seen as a model that better describes nurses' turnover intention.

This study has the following limitations. This study was a descriptive study in which paid female workers were representative samples, but in some cases nurses, convenience extraction and cross-sectional studies from general hospitals in some regions. Therefore, attention is needed to interpret it as a generalized result for hospital nurses and cannot be determined for causality. In addition, the model was constructed without consideration of ecological variables such as the effects of the organization culture and institutions not included in this study, and there is a limitation on the difficulty of verifying the reliability and validity of this study as a result of a single question. However, the question that was adopted by the Korean Women's Family Panel, which is regularly examined nationwide, is meaningful in that it can be compared with the intention of female workers in other professions.

Table 2. Logistic Regression Model Analysis of Turnover Intention

		Paid female workers		Nurses	
		OR	(95% CI)	OR	(95% CI)
Work-life conflicts					
work → family	(Positive impact)	0.297*	(0.098-0.903)	2.020**	(1.239-3.297)
	(Negative impact)	1.439	(0.778-2.663)	1.601**	(1.163-2.205)
family → work	(Positive impact)	0.86	(0.374-1.976)	1.202	(0.857-1.686)

	(Negative impact)	2.710*	(1.229-5.980)	1.845**	(1.175-2.899)
Age groups (ref. 23~29)	30~39	1.997	(0.574-6.948)	0.877	(0.488-1.577)
	40~55	1.007	(0.212-4.798)	0.316**	(0.140-0.715)
Marriage (ref. No)	Yes	0.380	(0.109-1.322)	0.733	(0.400-1.343)
Education (ref. College)	Bachelor	0.917	(0.321-2.625)	1.059	(0.608-1.845)
	≥ Masters	1.013	(0.204-5.043)	1.053	(0.493-2.251)
Stress level		4.182	(0.829-21.089)	1.335	(0.697-2.559)
Fit of model	F	1.02		14.60	
	McFadden's R2	0.013		0.175	

*p<0.05, **p<.01, ***p<.001

IV. CONCLUSION

This study is based on the empirical analysis of the relationship between work-life conflicts and the turnover intention of nurses and the results of paid female workers. Nurses' turnover intentions were higher than paid female workers' turnover intentions because they are related to the drop in the quality level of nursing services and the decrease of individual nurses' satisfaction level due to frequent turnover. The factors that can be improved are the effects of work-life conflicts. In particular, unlike paid female workers, nurses had additional turnover intentions due to negative effects on work. Measures will need to be taken to reduce adverse influences from work to home through flexible and sustainable forms of coordination of working hours and forms. Based on the results of the research, the copying strategy should be considered. One possible solution would be to consider measures to reduce negative impacts from work to home through flexible working hours and forms of adjustment and flexible and sustainable work practices. Subsequent studies will be needed. Measures to ease the conflict between work-life compatibility of nurses have provided new perspectives and basic data to reduce nurses' turnover intention. The high intention of changing jobs compared to paid female workers would be to remind nurses of their interest in the working environment and the need to seek practical alternatives and provide clues for further research.

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