

Key words : turnover, nurse

# Factors of the nurse's turnover in general hospitals

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## I. Introduction

A high rate of nurse turnover, which may be defined as voluntary exit from employment during a specified period of time, is of critical concern to hospital administrators in Korea as in other nations, since it can significantly affect on the quality of patient care from lack of competent nurses(Stryker, 1981). In addition, turnover can be expensive for employers in terms of finances, time and training. For example, the loss of one licensed nurse was estimated to cost between \$10,000 and \$30,000 in the US(Chambers, 1990). In Korea, the demand for quality patient care have been steadily increasing as the economy has improved. Consequentially, it is inevitable to have enough skilled nurses to provide quality care for patients. Considering the low ratio of the numbers of nurses and those of patients, a high rate of turnover causes more burden on the remaining nurses. Hiring of new nurses would adversely influences on the effectiveness and productivity of organizations due to the nurses' inexperience.

A few researches on turnover rate of nurses in Korea(Park, 1976; Hae, 1982; Kim, 1985; Kang, 1986) have been performed in 1970s and 1980s. In early 1990s(Kim & Park, 1991; Choi, 1998; Young, 1999), Kim & Park(1991) reported that diverse factors such as roles of nurses or personal dissatisfaction influence on turnover in complex and integrated manner. Kim(1995) indicated that length of employment, age, marital status, family responsibility, lack of autonomy and organizational problems affect the turnover

rate, but failed to provide any suggestions to decrease the rate. The current nurse turnover rate in Korea among nurses was 24%(Kim & Park, 1995), reported comparable to the rate reported in the US: 23% by Searle(1988); crude turnover rate of 30% in hospitals by Prescott & Bowen(Prescott, 1986). This rate, however, was substantially higher than those of other professions in Korea(Noo et al., 1983; Female Problem center, 1995). In hospital organization, this high turnover rate usually signified a serious problem(Cavanagh, 1989). Replacement of the resigning nurses with new employees would not be a good solution, since the newly hired nurses, in turn, are likely to be at high risk for resignation(Prescott, 1986; Ruffling et al., 1990). Therefore, underlying causes for turnover have to be understood in order to lower the turnover rate and prevent skilled nurses from leaving. So, it is necessary to study on the factors of the turnover among retired nurses directly. The purpose of this study was to identify major causes of registered nurses turnover among various possible factors and to understand the causes of premature nurse turnover problem in hospitals. The identification and understanding of these factors would help managers cope with the current high turnover problem.

## II. Background

Major change in the structure of the health care industry and increasing financial pressure have resulted in health care institutions becoming keenly interested in identifying the causes of nursing job turnover. Vanessa(1998) reported that proper management of nursing job turnover can

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improve the financial health and long-term survival of health care institutions. Traditionally, turnover among nurses has been attributed to such personal attributes as marital status, length of time in a job, and first job incumbency (Vanessa, 1998). In a similar vein, personal correlates of job satisfaction among nurses and women in general have included type of education, number of children, and degree of perceived internal control (Cavanagh, 1990). Other studies, however suggested that reasons for turnover pertain to job-related factors rather than personal factors (Alexander, 1899; Lowery & Jacobsen, 1984).

Self-reported organizational or job-related reasons for turnover include overtime work, rotating shifts, high workload, poor nurse leadership, poor relations with physicians, and inadequate time for professional development (Seybolt, 1986). Relatively few studies, however, have examined such organizational attributes in objective fashion. More recently, Alexander's study (1988) applied multivariate analysis using direct indicators to examine a theoretical model relating nurse turnover to job satisfaction, propensity to leave, autonomy, and various other organizational and personal characteristics. Weisman et al.'s study (1990) is particularly notable because it is one of the few that employs both a multivariate analysis and a prospective design. Lyons (1992) posited that role clarity, organizational communication and coordination, and job tension should be related to each other and to turnover. His results suggest that turnover is inversely related to satisfaction and role clarity and directly related to tension and inadequate communication and coordination. Price (1977) discusses the impact of turnover on the communication patterns and social organization of a workforce. Staff turnover may also have serious implications for patient care. Stryker (1981) believes that quality of nursing care decrease. Phillips (1987) indicates there are psychological implications for patients when staff leave.

The findings from the literature on nursing turnover suggest that extrinsic rewards and demographic attributes play little part in a nurse's decision to leave hospital nursing.

### III. Methods

The subjects of this study were 510 full-time registered, all female, nurses who left during 1998 from the 46 general hospitals (200-700 bed) in Busan and Gyeongnam. Through this study, data were collected for 2 months from Sep. to Dec. 2000. At first, after explaining to Nursing department about objectives of this study, nurse's name and address were obtained. The sample size of this study would be limited by the difficulty of locating and collecting data from nurses in Busan and Gyeongnam. Questionnaires were sent with returned envelopes after consent by telephones. The number of respondents was 392 (76.8%), resulting 369 questionnaires were usable when incomplete ones were excluded. These data were analyzed using SPSSWIN, t-test, ANOVA, percentage point, mean and standard deviation.

From the various factors that may influence nurse turnover, a rather broad and diverse group of factors were selected for examination using information and results reported in the literature (Alexander 1988; Cavanagh 1990; Price and Muller 1981) as well as consultation with professors. The questionnaire contained 8 factors and 24 questions reviewed as causes for turnover. The factors were pay, training and education, opportunity, participation, kinship responsibility, promotion, autonomy and instrumental communication. A four-point Likert scale was used as a response format for the 24 questions: a lower score means a higher relationship. The reliability coefficients in terms of Cronbach's alpha for causes was .83. For the solutions of the turnover problem, respondents were asked the following question: What has to be solved in order to lower the high turnover rate of nurses? Nurses' responses were categorized as pay, working hours, opportunities for self-development, family responsibility, promotion, responsibility and working relationship with coworkers and analyzed after consultation with two professors in the nursing administration, supervisor, head nurse, experienced staff nurses.

〈Table 1〉 general characteristics of the subjects

state	N	%
age		
24 years ↓	112	30.4
25-30 years	133	35.9
31-35 years	91	24.7
36-40 years	19	5.1
41 years ↑	14	3.9
education		
associate degree	215	58.2
baccalaureate degree	121	32.8
advanced degree	33	9.0
marital status		
the single	187	50.8
the married	182	49.2
number of children(the married)		
0	71	39.5
one child	69	37.7
two or more children	42	22.8
job position		
staff nurses	304	82.6
charge nurses	34	8.9
head nurses	26	7.1
supervisory nurses	5	1.4
length of employment		
1 year ↓	28	7.5
1~2 years	118	32.0
2~3 years	38	10.4
3~5 years	81	22.1
5~10 years	65	17.5
10 years ↑	39	10.5
prior experience of separation		
yes	105	28.4
no	264	71.6
the current status of employment		
yes	218	59.2
no	154	41.8
type of current job		
school nurses	93	42.6
clinics at work site	82	37.8
nurses in other hospitals	32	14.9
another job except nurse	11	4.7
degree of satisfaction for the current job		
satisfaction	69	31.7
normal	131	60.2
dissatisfaction	18	8.1

## IV. Results

### 1. General characteristics of respondents

Respondents who participated in this study were classified in 9 categories: age, education, marital status, job position, length of employment, prior experience of separation, the current status of employment, type of current job, degree of satisfaction for the current job are shown in table 1.

The age distribution of the respondents from the highest was 35.9% for 25~30 years, 30.4% for 24 and below, 24.7% for 31~35, 5.1% for 36~40, and 3.9% for 41 and above. The average age for the respondent was 29.6. 58.2% of the respondents had an associate degree, 32.8% had baccalaureate degree and 9.0% had advanced degree. Married were 50.8%: among the married respondents, those who dont have children were 39.5%; one child 37.7%; two or more children were 22.8%. Staff nurses comprised 82.6% as the highest, charge nurses 8.9%, head nurses 7.1%, and supervisory nurses 1.4%. As regards to the length of employment, those who stayed less than 2 years were 39.5%, and 3~5 years 22.1%.

It was interesting that only about 59.2% of respondents had jobs currently. Among those, 80.0% were in non-hospital positions, where regulae nurses had jobs as school nurses, and 37.8% at clinics at work site.

### 2. Turnover factors according to the marital status

Statistical analysis using t-test and ANOVA revealed that marital status( $t=3.83$ ,  $p=.00$ ) showed the most significant difference are shown in table 2. Pay( $t=3.27$ ,  $p=.032$ ), promotion( $t=3.84$ ,  $p=.025$ ) and kinship responsibility ( $t=1.95$ ,  $p=.018$ ) were found to be the categories that generated statistically meaningful results associated with the marital status in Table 3.

<Table 2> the turnover factors according to general characteristics

general characteristics	category	M±SD	F or t	P
age	24 years ↓	48.23±8.832	6.713	.012*
	25~30 years	50.13±6.739		
	31~35 years	50.47±6.587		
	36~40 years	51.71±8.833		
	41 years ↑	49.98±7.541		
educational level	associate degree	51.182±7.798	2.861	.072
	baccalaureate degree	50.532±7.798		
	advanced degree	56.809±3.516		
marital status	the single	51.200±8.190	3.832	.000*
	the married	50.200±7.128		
job position	staff nurses	50.588±7.283	1.042	.034*
	charge nurses	50.640±8.194		
	head nurses	63.200±7.872		
	supervisory nurses	57.362±8.272		
length of employment	1 year ↓	46.880±7.4336	4.839	.012*
	1~2 years	53.4856±6.608		
	2~3 years	51.2376±7.3816		
	3~5 years	50.088±7.7472		
	5~10 years	51.680±6.9664		
prior experience of separation	yes	49.8176±5.912	2.834	.096
	no	50.8312±7.600		

\*significant p<.05

<Table 3> turnover factor associated with the marital status

	pay	training/ education.	opportunity	participation	kinship responsibility.	promotion	autonomy	instrumental com.
the single	7.028±1.509	7.832±1.047	7.531±0.964	7.684±1.852	7.319±1.984	7.206±1.851	7.009±1.617	7.498±1.300
the married	8.257±1.246	7.128±1.053	7.937±1.517	7.687±1.357	7.159±0.964	7.517±1.608	7.168±1.384	8.240±2.143
t	3.273	1.478	8.037	3.579	1.954	3.843	5.224	1.891
P	.0321*	.0926	.5243	.2149	.0184*	.0257*	.6247	.0647

\*significant p<.05

### 3. Suggested solutions for the premature turnover

Suggested solutions for the premature turnover recommended by respondents were categorized in to seven

factors: child care, pay, promotion, opportunities for self-development, work responsibility and relations with coworkers. The results were shown in terms of marital status in Table 4.

For the married, child care(76.9%) was identified to be

<Table 4> turnover solutions according to the married status

factors	the single (n=187)	the married (n=182)
pay	109(58.3%)	67(36.8%)
working hours	112(59.9%)	109(59.9%)
opportunities for self development	61(32.6%)	39(21.4%)
family responsibility	21(11.2%)	140(76.9%)
promotion	67(35.8%)	50(27.5%)
nursing practice	72(38.5%)	83(45.6%)
working relationship with coworkers	82(43.8%)	69(37.9%)

the highest concern for improvement of the current work situation while working hours(59.9%) and nursing practice(45.6%) also were important factors.

For single nurses, the order of their request for improvement was in the area of working hours(59.9%), pay (58.3 %), working relationship with coworkers(43.8%) and nursing practice(38.5 %) in order.

## V. Discussion

Respondents who participated in this study were classified in 9 categories: The age distribution of the respondents from the highest was 35.9% for 25~30 years. 58.2% of the respondents had an associate degree. Married were 50.8% among the married respondents. Staff nurses comprised 82.6% as the highest. As regards to the length of employment, those who stayed less than 2 years were 39.5%. The present finding is consistent with previous finding by Lowery et al. (1984) who reported that significant number of nurses, after training and 1~2 years experience, left within 2 years.

It was interesting that only about 59.2% of respondents had jobs currently. Note that regular working hours are offered at these positions with which majority of nurses expressed their contentment. Examining the current jobs they held, or the jobs that they pursued, the data clearly indicated that the key factor for their primary choice was

whether the job they seek offered regular working hours such as school nurses or clinics at work sites. Even those who were not currently holding jobs were conjectured to be at preparatory stage to obtain positions that provide regular working hours.

Marital status showed the most significant difference are shown( $t=3.83, p=.00$ ). Thus study has been focused upon the various factors related to marital status. With regards to pay and promotion, the single nurses compared to the married had more negative views. Seybolt(1986) reported that improper promotion and pay affected on nurses' turnover, the single nurses appeared to have the desire to be compensated in terms of pay and promotion when they were not content with overtime nor irregular working hours. But, when their desire was not materialized, the ensuing dissatisfaction seemed to contribute to the factors for leaving. This agreed with the study results by Porter and Steer(1973): expected wage has far more influence on the leaving than the actual wage itself. Regarding promotion, nurses wish to be promoted in order to, mainly, avoid the stress from the night shift, since they would have more control over their working hours if they were higher in rank. This argument is supported by the evidence elucidated in the previous section of general characteristics of respondents. For example, when staff nurses are promoted to charge nurses in Korea, they would have increased salary, higher contentment with their positions, and of course, the choice of shifts. Consequently when staff nurses view the current promotion system as unfair and their probability of promotion unacceptably low, measures have to be undertaken to counterbalance this dissatisfaction in order to prevent them from leaving.

Concerning kinship responsibility, married nurses had far more responsibility over the single nurses ; they had more direct family responsibility for their husbands and children. In this sense, the single nurses would have less responsibility for their family. Wolf(1981) reported that family responsibility particularly for children, causes nurses to leave. Similarly, Wandelt et al. (1981) also reported that family responsibility was the most important among the various factors that contribute to high turnover. These

reports as well as this study support that child rearing responsibility is one of the most difficult problems to overcome for female nurses.

Suggested solutions for the premature turnover recommended by respondents were categorized in to seven factors: child care, pay, promotion, opportunities for self-development, work responsibility and relations with coworkers. For the married, child care was identified to be the highest concern for improvement of the current work situation while working hours and nursing practice also were important factors. They desired child care facilities on work-site, part time availability, and a leave of absence policy for child rearing. As Korean women have the primary responsibility for child rearing, the lack of child care facilities on the job site encourages the nurses with young children to become the statistics for high turnover. The matter dealing with the working hours might be one of the most important underlying determinants for the high turnover rate, since it is inherently closely related to the child care problem, although it is arguable. Unfortunately the current study was not designed to examine any relationship between the child care issue and working hours.

The one's single nurses demand for improvement were working hours, pay, working relationship with coworkers and nursing practice. It is interesting to observe that the single nurses listed the current working hours (scheduling) as the primary area for improvement. This is also true for married nurses if child care, which is not a problem for single nurses, is excluded. The respondents requested proper compensation for overtime work and flexible working hours in the detailed sub-list. They demanded appropriate remuneration for evening or night shift. As low wage was shown to be one of the important factors for leaving(Ruffing et al. (1984), the present findings supported consideration of improved wage system based on considering the peculiarity of working hours and working conditions of nurses.

Working relationship with coworkers also was specified as one of the important factors in nurses' response to the questionnaire. In agreement with this finding, Porter and Steer(1973) found that employees left jobs when the cooperative environment, which provided support and

comradeship, was not maintained among nurses. Wolf(1981) indicated that the primary care system, in individual nurses are responsible for a patient throughout his/her stay, helped to improve the relationship between doctors and nurses. In the relationship with superiors, they want superiors, to have humanism rather than authority and transformational leadership.

As for nursing practice, guarantee of autonomy were requested to improve the current system. This indicates that nurses would like to have a more developed system of nursing administration. While the acknowledgment and understanding of their exact roles would enhance nurses' productivity and nursing effectiveness, the lack of autonomy augment the degree of dependability and incapability. Although two staff nurses are requisite for every 5 hospitalized patients by the Korea Nursing Law, hospitals that are abiding by this law occupied for only 16 % of the total number of hospitals(Kim & Park, 1995).

## VI. Conclusion

In order to identify the underlying factors for high turnover rate of nurses, to understand the causes of premature nurse turnover problem and to provide solutions for efficient management of human resources and quality patient care, a study was conducted using survey of 369 nurses who left from 46 major hospitals in Korea during 1996.

Among the various factors considered which may influence turnover, this study found that there were distinct differences in the causes of high turnover rate depending upon the marital status. For the married, the child care problem likely related to the irregular working shifts was the dominant determinant for turnover. As solutions to mitigate this problem, child care facility at hospitals, employment of the part time system and adoption of the leave of absence policy are proposed. For the single, irregular working hours played a dominant role in turnover although their response were much more diverse than those of the married. Compensatory pay system adjusted for irregular working hours, flexible hours that nurses have

options to select, and effective promotion evaluation system were expressed as ways of preventing single nurses from leaving.

Nurses in Korea, being dominantly women, have distinctive matters dealing with pregnancy, child birth, child rearing and family work. Unless these matters are resolved and subsequently implemented in national level, the problems of nurses premature leaving would be difficult to overcome.

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**-Abstract-**

주요용어 : 이직, 간호사

### 임상간호사의 이직요인에 관한 연구

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최근 병원행정가들의 가장 관심을 끄는 분야 중 하나가 간호사의 이직이다. 본 연구는 실제 이직을 한 간호사를 대상으로 이직요인을 파악하고 이에 대한 이직대책을 제시함으로써 조기에 간호사의 이직을 예방하여 효율적으로 간호인력을 관리하고 간호의 질적 향상을 하는데 도움을 주고자 46개 종합병원에서 1998년 1월~1999년 1월 사이에 이직을 한 간호사 369명을 대상으로 조사, 분석한 후향연구이다.

연구결과를 통해 이직결정에는 다양한 요인들이 영향을 미침을 알 수 있었다. 특히 결혼상태가 가장 큰 요인으로 나타났으며, 기혼인 경우는 자식의 양육문제가 가장 원인이었으며, 미혼인 경우는 불규칙한 근무시간이 큰 영향을 미치고 있었다. 그에 대한 해결책으로 자식 양육문제의 경우, 근무병원 내에 탁아시설을 운영하거나 육아양육휴가제도 및 시간제 근무 등의 도입을 심각하게 고려해 볼 필요가 있다. 불규칙한 근무시간은 근무의 수당을 지불하거나 간호사가 스스로 자신의 근무시간을 선택할 수 있는 융통성 있는 스케줄링, 또는 승진평가 제도를 적절하게 할 수 있는 제도의 도입을 제안한다.