

〈 Research Data 〉

Factors Causing the Rapid Turnover Among Novice Nursing Staff: Analyses of the Survey Conducted in 2006 on the Employment Situation of Nursing Staff in the Tokyo Metropolitan Area

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Abstract

Objective To determine the correlations between the rapid turnover of novice nursing staff and various potentially related factors, to examine effective preventive measures against rapid turnover of nursing staff and devise measures to secure them.

Methods Mail survey by self-reported questionnaire (1) Survey on currently working nurses: Nurses working at any of 545 institutions selected from 3,213 medical institutions, including hospitals. (2) Survey on nurses who had resigned: 150 unemployed nurses who responded to posted notices at reception counters or other places in local government institutions. The subjects were 2,574 novice nurses who had either resigned early or had not resigned early. The correlations of various factors with the rapid turnover were analyzed using multiple logistic regression analysis. The explanatory variables were (1) training during the novice period, (2) night-shift work, and (3) awareness of being suited or not to the workplace.

Results The following results were obtained:

- (1) Nurses who received training inside or outside the hospital during the novice period were less likely to resign early. The presence/absence of a specialist trainer in nursing was not correlated with the rapid turnover.
- (2) Early initiation of night-shift work and the night-shift frequency before the first night-shift without a mentor were not correlated with the rapid turnover.
- (3) Novice nursing staff who had awareness of being ill-suited to the workplace or wanted to quit the job during novice period were more likely to resign early.

Conclusion Development of support measures by major institutions offering study programs or establishment by these institutions of measures for improving training may lead to effective prevention against the rapid turnover of novice nursing staff and establishment of measures to secure nursing staff. A specialist trainer in nursing may contribute to improvement of the quality of the training system. It might be effective to combine employment placement measures according to the lifestyles of nurses who want to change their workplace or return to the job with the supportive measures to facilitated acquisition of the latest knowledge/skills.

Keywords: new graduate nursing staff, early turnover, prospective planning for supply and demand of Tokyo metropolitan government official nursing staff, training, night shift, awareness of aptitude for workplace

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I. Introduction

As a policy in the field of nursing, plans and forecasts of demand and supply of public health nurses, midwives, registered nurses, and practical nurses (hereinafter called "nursing staff") have been developed since 1974 in Japan,

and measures to secure adequate supply of nursing staff in accordance with the socioeconomic circumstances were established. In the fiscal 2005, the Ministry of Health, Labour and Welfare asked the prefectural governors to

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develop a forecast of the demand and supply of nursing staff in each prefecture and conduct a survey on the employment situation of nursing staff (Article 33 of the Public Health Nurse, Midwife, and the Nursing Law), in an attempt to estimate the demand for nurses and develop the 6th Forecast of Demand and Supply of Nursing Staffs (for 2006-2010). In response to this request, Tokyo metropolitan government conducted the Survey on Nursing Staff Employment Situation in the Tokyo Metropolitan region (Surveillance period: August 22nd to September 9th, 2005) (hereinafter called the "employment situation survey"). The results of the employment situation survey revealed the actual situation of employment of the nursing staff, including the fact that the total number of nursing personnel at the target facilities in the Tokyo metropolitan region had increased by 3,194 since the last survey (in 2002), to 90,895 (as at the end of Dec. 2004)¹⁾.

On the other hand, it has been pointed out that in recent years nursing services have become more complex and diverse with the changing environment.²⁾ Therefore, local governments are expected to plan, formulate and execute measures to secure an adequate supply of nursing staff in a more efficient and effective way, so that the system for providing patient/resident-oriented services can be improved. In order to forecast the demand and supply of nursing staff in the Tokyo metropolitan region from 2007 to 2011 and to review measures to secure a stable supply of nursing staff, the Tokyo metropolitan government has established the "Review Panel for Forecasting the Demand and Supply of Nursing Staff in Tokyo Metropolitan" (hereinafter called the "Review Panel"), to examine the methods for forecasting the demand and supply of nursing staff and measures to secure nursing staff.

First, the review panel examined the factors related to the difficulties in securing nursing staff by collecting the relevant literature, and found that the measures for securing nursing staff mostly emphasized "prevention of the rapid turnover of nursing staff"³⁾⁴⁾⁵⁾. When the literature was further analyzed to examine the factors of the rapid turnover, the following factors were identified; 1) the major reasons for the desire to resign early (within 5 years of graduation) were "heavy responsibility", "awareness of being ill-fit" and "lack of knowledge", and those for not resigning early was "support from superiors"⁶⁾, 2) 80% of the nurses who had resigned cited dissatisfaction with "working environment" and "human relations" as the reasons⁷⁾, 3) the results of the survey on rapid turnover of novice nursing staff showed that the necessary measures were postgraduate training for novice nursing staff, having specialist trainers in nursing, and increasing the number of nursing staff in the employment period, etc.⁸⁾ The review panel further

examined these findings, and taking into account the results of the employment situation survey, reached a conclusion that the measures for securing nursing staff in the Tokyo metropolitan region should include "measures to support continuous employment and measures to develop human resources" providing support to the nursing staff, and to achieve this purpose, measures to secure nursing staff should mainly focus on measures to develop an environment that he/she "can continue working even if he/she changes the workplace," and "measures to prevent turnover" and "to support reemployment"⁹⁾. Then the review panel and Tokyo metropolitan government agreed that "Scientific evidence should be obtained by investigating the background that the novice nurses are unable to complete "training during the novice period to obtain basic knowledge and skills related to general nursing work and to acquire self-confidence and intention to continue working" (hereinafter called the "postgraduate training") ,and by searching "the factors between turnover during the postgraduate training" and "the factors that seem to make obtaining nursing staff difficult"(hereinafter called the "factors related to difficulty in obtaining nursing staff"). Based on the above background, the Tokyo metropolitan government conducted "the Second Survey on Nursing Staff Employment Situation in the Tokyo Metropolitan region (from May 31 to June 30, 2006)" (hereinafter called the "second employment situation survey") to investigate the reasons as to why nursing staff cannot complete postgraduate training. The study was part of the second employment situation survey to determine the correlations between the rapid turnover of novice nursing staff and various potentially related factors, to examine effective preventive measures against the rapid turnover of nursing staff and develop measures to secure them.

In the study, "novice period" was defined as within 3 years from the first work, and "introduction training" was the training at the workplace where nursing staff received training within one year of their first employment as a nursing staff. On the other hand, "training in the novice period" included all trainings, including off-the-job training, that the nursing staff could receive during the novice period, regardless of the providers of the training. As for resignation, "nurses who resigned during the novice period" were defined as nursing staff who resigned within 3 years from the first workplace (hospital in most cases), and "novice nurses who did not resign early" were those who had worked for 3 years or longer at the first workplace (Table 1). In reference to the turnover of nursing staff, "rapid(ly) or early" means "within 1 year."¹⁰⁾¹¹⁾ In the case of resignation of novice nurses within 1 year, it was pointed out that the resignation was affected by "reality shock"¹²⁾¹³⁾, meaning that new graduate professionals

Table 1. Term definitions in the survey on working and resigned nurses

- A) Novice nurses who resigned early= nursing staff who resigned from the first hospital within 3 years of employment, i.e. those who fulfill i) or ii) below.
- i) Currently working nurses who fulfill both “(1) and (2)” below.
- (1) Current workplace is “the second or later”, counted from the first workplace. (nursing staff career only. Any transfers within the same corporation or equivalent are counted as a separate workplace, but any internal transfers within the same hospital or equivalent are counted as the same workplace.)
- (2) Years of employment at the first workplace was “less than 3 years”
- ii) Resigned nurses who worked at the first workplace for “less than 3 years”.
- B) Novice nurses who did not resign early = nursing staff who have resigned, but worked at the first workplace for 3 years or longer, i.e. nursing staff who fulfill i) or ii) below.
- i) Currently working nurses who fulfill both “(1) and (2)” below.
- (1) The current workplace is “the second or later” workplace, counted from the first workplace
- (2) Years of employment at the first workplace was “3 years or longer”
- ii) Currently working nurses who fulfill both “(1) and (2)” below.
- (1) The current workplace is “the first”, counted from the first workplace
- (2) Years of employment at the current workplace is “3 years or longer”

who began to work in the actual workplace experienced unexpected suffering and discomfort (= reality), causing different physical, psychological and social symptoms of shock, even though they took professional education and training for several years to make themselves ready for the job after graduation¹⁴⁾¹⁵⁾. In this study, however, rapid turnover was defined as resignation within 3 years because the guideline period, for which nursing staff could complete the introduction training program in the same workplace, was about 3 years, and it was important to determine the correlation between introduction training experience and resignation.

II. Study methods

The survey was conducted according to the second employment situation survey. The second employment situation survey consisted of the “survey on currently working nurses” and “the survey on resigned nurses” as of the survey date. The subjects were nursing staff working at hospitals in the Tokyo metropolitan area, clinics with 19 beds or less, clinics without beds, healthcare institutions for the elderly, nursing homes for the elderly, and visiting

nursing stations (hereinafter called “work places, including hospitals”). Each of the surveys was conducted as follows:

(1) Survey on currently working nurses

Among the 13,925 work places, including hospitals, in the Tokyo metropolitan area, 3,213 institutions consented to participate in the survey. By stratified proportional sampling according to the type of institution, 545 institutions were randomly sampled and the nursing staff working at these institutions were surveyed. Based on the results of the employment situation survey, the estimates calculated from the number of nursing staff by the type of institutions were used to determine the ratio of proportional sampling of the institutions.

Self-reported questionnaires were mailed to each of the selected institutions asking the administrators to distribute the questionnaires to the nursing staff. The completed questionnaires were recovered from each respondent by mail. The number of responses and the institutions surveyed are shown in Table 2.

(2) Survey on resigned nurses

Requests for cooperation with the survey were solicited through various public media, including display of posters and distribution of leaflets at work places in the Tokyo metropolitan area, municipal institutions, reception counters of local government institutions, and private commercial institutions. Responses were obtained from 150 nursing staff who had resigned before the survey date. Self-reported questionnaires were mailed to each of these nursing staff asking them to return the completed questionnaires by mail.

Table 2. Distributed and responded numbers of questionnaire by institutions in the survey on currently working nurses

	Number of institutions including hospitals (n)	Number of institutions at which the questionnaires were distributed (n)	Number of responded questionnaires (n)
Hospital	668	60	2,031
Clinics with 19 beds or less	1,044	60	146
Clinics without beds	11,151	300	202
Healthcare institutions for the elderly	143	25	165
Nursing homes for the elderly	368	50	248
Home-visiting nurse station	551	50	211
(No response)	-	-	14
Total	13,925	545	3,017

(3) Correlation between rapid turnover and related factors

We investigated the correlation between rapid turnover of novice nurse and training/night-shift work/awareness of being suited to workplace during the novice period using the answers from 670 “novice nurses who resigned early” (who left the first workplace, including hospitals, within 3 years) and 1,904 “novice nurses who did not resign early” (who had worked at the first workplace, including hospitals, for more than 3 years), using multiple logistic regression.

Specifically, we used the following variables: a) presence/absence of introduction training experience, b) presence/absence of a trainer at the workplace, c) presence/absence of outside training experience, as “factors related to training during the novice period”; a) duration before the first night-shift work, b) duration before the first night-shift work without a mentor, as “factors related to night-shift work”; and a) presence/absence of awareness of being suited to workplace, b) presence/absence of a desire to resign, as “factors related to awareness of being suited to workplace”. Furthermore, among the survey items related to basic characteristics that were considered to be relevant to the rapid turnover by the review panel of Tokyo metropolitan government, we included age group, presence/absence of child(ren), first place of work (hospital/non-hospital institution) and employment status (working/resigned) at the time of the survey as factors for adjustment. The statistical software SAS 9.1.3 was used for the analysis.

<Ethical considerations>

The study plan related to analysis of the results of the survey by the Tokyo metropolitan government in this study was approved by the Ethics Review Advisory Committee on Epidemiological Studies, National Institute of Public Health (approval number: NIPH-IBRA#09004).

III. Results

Out of the distributed survey questionnaire obtained 3,017 responses from the currently working nurses and 112 responses from the survey of resigned nurses (Table 3). The 3,129 responses were classified into two groups: “novice nurses who resigned early” (670 nurses) and “novice nurses who did not resign early” (1,904 nurses) (Table 4). We excluded the nursing staff who had been continuously working at the first workplace for less than 3 years (299 nurses) and nursing staff who did not answer the questions designed to determine whether they resigned early or

Table 3. Characteristics of the respondents in the surveys of currently working nurses and resigned nurses

	Respondents in the survey on currently working nurses n = 3,017		Respondents in the survey on resigned nurses n = 112	
	n	%	n	%
Sex				
Female	2,869	95.1	109	97.3
Male	139	4.6	3	2.7
No response	9	0.3	0	0.0
Age group				
(1) under 30	959	31.8	12	10.7
(2) 30s	937	31.1	59	52.7
(3) 40s	626	20.7	25	22.3
(4) 50s	374	12.4	13	11.6
(5) 60 years or more	111	3.7	3	2.7
No response	10	0.3	0	0.0
With or without child(ren)				
(1) With	1,205	39.9	84	75.0
(2) Without	1,812	60.1	28	25.0
First workplace				
(1) Non-hospital institution	310	10.3	11	9.8
(2) Hospital	2,707	89.7	101	90.2

Table 4. Classification of “novice nurses who resigned early” and “novice nurses who did not resign early” in all responses

	Survey of currently working nurses	Survey of resigned nurses	Total	%
Novice nurses who resigned early (n)	636	34	670	21.4
Novice nurses who did not resign early (n)	1,836	68	1,904	60.9
Subjects excluded from the analysis [¶] (n)	299	0	299	9.6
Missing [†] (n)	246	10	256	8.2
	3,017	112	3,129	100.0

[¶] Subjects excluded from the analysis = Nursing staff who continue to work at the first place of work for less than 3 years, i.e. those who fulfill both (1) and (2) below.

(1) Those who continue to work at the first place of work

(2) Those who have been working at the current place of work for less than 3 years.

[†] Missing = Nursing staff who could not be classified because they did not respond to the relevant items on the questionnaire.

otherwise (256 nurses).

Among the factors related to difficulty in securing nursing staff and set as the targets of the study by the review panel, the questions and answer options to obtain factors that needed to be adjusted for, objective variables

and explanatory variables for the analysis are shown in Table 5. The results of the multiple logistic regression analysis conducted to determine the correlation between each of the factors and the rapid turnover of nursing staff using the basic characteristics as factors for adjustment

Table 5. Questions and answer options in the surveys on currently working nurses and resigned nurses

Factors	Questions and answer options
Adjusting factors	Age How old are you? (1) Under 30 (2) 30s (3) 40s (4) 50s
	Child How many children do you have? (1) One child or more (at least 1) (2) Childless (0)
	First place of work Please let us know about your first workplace. Where did you start your career as a nursing staff for the first time after registration? Please select one of the following options. (1) Non-hospital institution (clinic, maternity home or equivalent) (2) Hospital
For extracting nurses who resigned early or those who did not resign early.	Career Please let us know about your career (nursing staff career only). How many times did you change your workplace? (*transfers within the same corporation or equivalent should be counted as change to a separate workplace. Transfers within the same hospital are not counted as change of workplace). (1) Not changed (the first workplace) (2) Once or more
	Length of employment in your current workplace How many years have you been working at your current workplace? (1) Less than 1 year (2) 1 year to less than 3 years (3) 3 years to less than 5 years (4) 5 years to less than 10 years (5) 10 years or more
	Length of employment in the first workplace How many years did you work at your first place of work? (Please answer only if you changed your workplace). (1) Less than 3 years (2) 3 years or more
(1) Introduction training	Introduction training at the first workplace Please let us know about the introduction training ("Introduction training" means the training received at the first workplace after registration)? Did your first place of work as a nursing staff provide an introduction training program? (1) Yes (2) No + unknown
	Specialist trainer in nursing Did your first place of work as a nursing staff have a specialist trainer in nursing? (1) Yes, it had a specialist trainer in nursing + Yes, it had a trainer, but not specific to nursing practice (2) No + unknown
	Introduction training experience Did you receive (or are you receiving) introduction training at your first workplace? (1) Yes (2) No, I did not + I don't know
	Experience of training out of the hospital Did you receive the training out of the hospital (training programs provided by Japanese Nursing Association or equivalent) at your first workplace? (1) Yes (2) No + I don't know
(2) Night-shift work	Time until start of night-shift work How long after you were employed did you start doing night-shift work? (1) Less than 1 month (2) One month or more (3) I had no night-shift work
	Night-shift frequency before the first night-shift work without a mentor [¶] How many times did you work in a night shift before the first night-shift work without a mentor? (1) Zero (night-shift work without a mentor from the beginning) (2) once (3) twice (4) three times (5) four times + I don't remember + I had no night-shift work
(2) Awareness of being suited to a workplace	Presence/absence of awareness of being suited Do you think your first hospital (workplace) was (is) suitable for you? (1) Yes, it was + Yes, it was relatively suitable (2) No, it was not really suitable + No, it was not suitable + I don't know
	Desire for resignation [#] Had you desired to resign during your novice period? (1) Yes (2) No

[¶] Night-shift work without a mentor: night-shift work not as an apprentice, but as a regular shift nurse

[†] Awareness of being suited to a workplace: awareness that the workplace is suitable for oneself

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are summarized in Table 6. However, we excluded the respondents who had not given appropriate answers to the questions used as explanatory variables, and used answers from 618 “novice nurses who resigned early” and 1,740

“novice nurses who did not resign early” (Table 6) for analysis.

(1) Factors related to training during the novice period

The rapid turnover was significantly correlated to the

Table 6. Comparison between “novice nurses who did not resign early “and” novice nurses who resigned early”

	Turnover in the novice period				Crude odds ratio	Adjusted odds ratio [¶]	
	Early (n = 618)		Not early (n = 1,740)			Odds ratio	95%CI
	(n)	(%)	(n)	(%)			
(1) Factors related to training in the novice period							
Introduction training							
Received	401	64.89	1,358	78.05	0.52	0.607**	0.449-0.822
Not received	217	35.11	382	21.95	1.00	1.00	
Specialist trainer in nursing (during introduction training)							
Presence	363	58.74	1,133	65.11	0.76	1.404*	1.067-1.847
Absence	255	41.26	607	34.89	1.00	1.00	
Training outside the hospital							
Received	202	32.69	952	54.71	0.40	0.455***	0.367-0.564
Not received	416	67.31	788	45.29	1.00	1.00	
(2) Factors related to night-shift work							
Interval until the first night-shift work [whether started night-shift work early or not]							
<1 month	251	40.61	811	46.61	0.81	0.751*	0.610-0.925
≥ 2 months	31	5.02	45	2.59	1.81	1.247	0.727-2.139
No night-shift work	336	54.37	884	50.80	1.00	1.00	
Night shift frequency before the first night-shift work without a mentor [†]	618		1,740			0.950	0.878-1.029
(3) Factors related to awareness of being suited to the workplace							
Awareness of being suited to the workplace							
Had	358	57.93	1,352	77.70	0.40	0.462***	0.372-0.574
Did not have	260	42.07	388	22.30	1.00	1.00	
Desire to resign							
Had	442	71.52	1,061	60.98	1.61	1.510***	1.206-1.890
Did not have	176	28.48	679	39.02	1.00	1.00	

* P < 0.05, ** P < 0.01, *** P < 0.001

¶: Factors adjusted for: (1) age group: <30 years, in the 30's, in the 40's, in the 50's, ≥60 years (2) with/without child(ren), (3) first place of work (hospital/ non-hospital institution), and (4) group (currently working nurses/resigned nurses; data comparison between groups with different investigation methods) were used.

† : Treated as a continuous variable.

presence/absence of introduction training regardless of whether it was provided inside or outside the hospital, to the presence/absence of a specialist trainer in nursing, and to with/without training experience out of the hospital. Especially, nursing staff who received training were strongly correlated to no early resignation (presence of introduction training: adjusted odds ratio = 0.607, $p = 0.001$; with training experience out of the hospital: 0.455, $p < 0.001$). On the other hand, with regard to the presence/absence of a specialist trainer in nursing, novice nurses who worked at the institution with such a trainer were more likely to resign early (1.404, $p = 0.015$), an inverse correlation opposite to what was shown with the crude odds ratio (0.76).

(2) Factors related to night-shift work

When compared to nurses not doing night-shift work, the rapid turnover was significantly correlated with the start of the first night-shift work within a month of being employed (0.751, $P = 0.015$), but not with the start of the first night-shift work more than two months after being employed. Furthermore, there was no significant correlation with the night-shift frequency before the first night-shift work without a mentor (not as an apprentice but as a regular shift nurse).

(3) Factors related to awareness of being suited to workplace

There was a strong negative correlation between the rapid turnover and the awareness that the workplace is suitable (hereinafter called the “awareness of being suited to workplace”) (0.462, $p < 0.001$) and a positive correlation with the desire to resign during the novice period (hereinafter called the “desire for resignation”) (1.510, $p < 0.001$).

IV. Discussion

Previous studies^{4,14} have suggested a correlation between nonparticipation in training during the novice period and the rapid turnover, which also confirmed from these results, regardless of whether the training was conducted inside/outside the hospital. These results seem to suggest that the training of nurses during the novice period is an effective measure to prevent the rapid turnover of the nursing staff. Tokyo metropolitan government has already implemented basic measures to promote participation in training, including enlightening novice nurses on training of nursing staff¹⁶, but specific measures focusing more on training during the novice period may be needed in the future.

Considering that each institution is running and setting up a postgraduate human resource development of nursing staff, the main training institutions should closely review the reasons of nonparticipation in training among novice nurses and examine the support system in detail. If nursing

staff intended, but decided not to receive the training by themselves, measures to promote participation in training during the novice period should focus on how to motivate each novice nursing staff to receive the training and how to collect information from the training. It seems also to be useful, as the case of measures to promote participation in training of each nursing staff, to introduce a shadow training* aimed at making an image of professional nursing staff¹⁷, and to make and use the standardized education system for early adaptation to the hospital at small-and-medium-sized private hospitals¹⁸.

Moreover, based on reports such as “the most common reason for not resigning during novice period is ‘supervisor’s support’”¹⁹, it may be necessary to postgraduate training to supplement the knowledge and skills in relation, as well as provide mental support for practice activities, or “supervisor’s support”. On the other hand, if novice nurses cannot receive training due to an undeveloped system or condition of training, measures to promote training in the novice period may need to be reviewed in order how to improve the environment of the main institution providing training where nurses can easily receive the training. Measures to enhance the training system, such as providing support for maintenance of equipment for practical training at the main training institutions may be effective as a measure for obtaining nursing staff who have been trained in the novice period.

It might seem to have little correlation between the nonparticipation in training during the novice period and the factors of “presence/absence of a specialist trainer in nursing”. But there may have been nonparticipants in training during the novice period at the first workplace which “had” specialist trainers in nursing, so we analyzed participants and nonparticipants. In the multivariable analysis and odds ratio after adjustments for the factors of “presence/absence of a specialist trainer in nursing”, the correlation of the rapid turnover to an institution with a trainer for nursing work versus one without such a trainer was 1.404, which was significantly high and counter intuitive. Then, we examined the correlation of the rapid turnover to each factor set as the independent variables to determine factors influencing the “presence/absence of a specialist trainer in nursing”, and found a strong correlation only with “with/without introduction training experience” (Spearman’s correlation coefficient = 0.623, $p < 0.001$). Then, to determine whether there was an interaction between “presence/absence of a specialist trainer in nursing” and “with/without introduction training experience”, we performed stratified analysis of the latter factor, that is, “with/without introduction training experience”. We examined the correlation between “rapid

turnover of novice nurses” and “a specialist trainer in nursing” in each of the groups of nurses “with introduction training experience” and “without introduction training experience”. As a result, the point estimates of the adjusted odds ratio were calculated to be 1.254 (95%CI: 0.933-1.685) in the “with introduction training experience” group and 1.138 (95%CI: 0.686-1.888) in the “without introduction training experience” group, and we could not determine if there was an interaction.

Considering these findings, we concluded that the value reversal between the crude odds ratio and the adjusted odds ratio in regard to the presence/absence of a specialist trainer in nursing was confounded by the factor of introduction training experience. As a whole, this time, although the group with a specialist trainer in nursing had a strong tendency to resign early, it seemed that the presence/absence of a specialist trainer in nursing alone was not a relevant factor by itself. The results of this factor may be reasonably interpreted as “presence of a trainer (as an independent factor) does not lead to the prevention of rapid turnover” when other factors including “with/without training experience” are the same. Therefore, a specialist trainer in nursing in the training during the novice period seemed to be required to play a role, not as “measures to prevent turnover of the nursing staff” but as “measures to enhance training during the novice period”, i.e., providing a “supervisor’s support”, “role model for the nursing staff as a professional” and “assistance of early adaptation to a hospital”, for securing nursing staff.

Starting night-shift work at an early stage may be a factor associated with resignation at a relatively early stage after employment, for example, even at the start of the career. In fact, however, starting night-shift work at an early stage was not a factor associated with resignation within 3 years of employment. The night-shift frequency before the first night-shift work without a mentor appeared unlikely to have a significant correlation with the rapid turnover. The study did not show any association between the factors related night-shift work and the rapid turnover. Understanding whether individual novice nurses feel ill-suited to their workplace or have any intention to leave was considered to give a clue to the managerial staff for identifying possible early (=in the novice period) resignations. In addition, promoting policies to establish a scheme in which the government pays closer attention to the desires of individual novice nurses with ill-suited to their workplace or show intention to leave was considered as an effective way to secure nursing staff. A previous study of novice nursing staff’s early adaptation to the workplace²⁰⁾ revealed an association between the latent structures of early adaptation to the workplace and 6 specific factors for reality shocks. Based

on the results, it was reported that “not only preventing reality shocks, but also supporting and watching over new graduate nurses adapt to their workplace early was needed to prevent the rapid turnover of new graduate nursing staff.” A previous task study on the intentions to resign within the fifth year of employment showed that a “sense of burden of new tasks and responsibilities,” occurred in the third to fifth year of employment, and that addressing such sentiments was an important task to prevent rapid turnover⁶⁾. Taking into consideration the results of this study, we consider it necessary to pay more attention to the anxieties or personal sentiments that individual nursing staff may have toward their workplace and work, including awareness of being suited to the workplace and intention to leave, for establishing effective measures to prevent rapid turnover. We also considered that specific measures to secure nursing staff might help nursing staff who have resigned to restart their career as a nurse in a more suitable workplace. For example, in “Tokyo Nurse Plaza” run by the Tokyo metropolitan government under “Act on Securing of Work Forces of Nurses and Other Medical Experts” as an establishment engaged in consulting and outplacement service, practical training for reemployment, and activities to raise awareness of nursing, holding training to provide knowledge and skills necessary for reemployment and giving reemployment support service in cooperation with hospitals and other medical facilities can be promising measures to secure nursing staff.

This study did not consider personal information, such as personal career and academic background, because such information was not collected in this survey. The academic background, in particular, has been reported to be correlated with the rapid turnover in previous studies. A study of factors affecting the rapid turnover of novice nurses in university hospitals showed that “graduation of nursing universities’ was the factor most strongly associated with the rapid turnover”²¹⁾. Therefore we cannot deny the possibility that these factors related to human resource development may act as a bias. Similarly, the disparity between registered nurses and practical nurses can also introduce bias in the analysis of factors affecting the turnover, but this could not be considered in this study. More detailed factors, not only the personal career and academic background but also personal character and ambitions, may need to be considered in future studies on the rapid turnover of nursing staff. In addition, the study used surveys conducted by governments. Thus, although there were limitations of the survey design, we were able to clarify factors that were correlated to the rapid turnover of nursing staff, as pointed out by previous studies. We consider that the findings obtained in the study provide important evidence for

effective measures.

On the basis of the scientific evidence obtained from the second survey employment situation, including this study, the Tokyo metropolitan government has started 1) a support project to secure nursing staff in this region and 2) a project to improve introduction training programs for novice nursing staff, as new measures in the fiscal year 2008(9) 22), in order to secure nursing staff. The epidemiological survey conducted by the government may have a disadvantage that there are frequently restrictions on the survey design, but the advantage that it commonly covers a relatively large population and that it is easier to obtain cooperation from the respondents. In the future, we expect that an epidemiological survey conducted by the government would be effectively used as information to clarify evidence for formulating efficient and effective measures to solve diverse problems related to public health administration.

* “a shadow training” is an innovative internship program for novice nurses to assist novice nurses in rapidly transitioning into the practical nurse role, working with experienced nurses in the practical environment, in addition to formal education and skills training in critical-care nursing.

V. Conclusion

The correlation between factors related to difficulty in securing nursing staff at medical institutions, including hospitals, in Tokyo and rapid turnover of nursing staff was analyzed and examined. Nurses who received training inside or outside the hospital during the novice period were less likely to leave their job early. Development of support measures by major institutions offering study programs or establishment by these institutions of measures for improving training may lead to effective prevention against the rapid turnover of novice nursing staff and establishment of measures to secure nursing staff. Presence/absence of a specialist trainer in nursing was not correlated to the rapid turnover. “Early initiation of night-shift work” and “night-shift frequency before the first night-shift work without a mentor” were not correlated with the rapid turnover. Novice nursing staff who had awareness of being ill-suited to the workplace or wanted to resign the job during the novice period are more likely to leave the job early. It seemed that employment placement measures undertaken according to the lifestyles of nurses who wanted to change their workplace or return to the job combined with the supportive measures for making it easy to learn the latest knowledge/skills would be effective.

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目的 新人看護職員の早期離職と各種関連要因の関連を明らかにし、効果的な看護職員の早期離職防止策および確保施策を検討する。

方法 郵送自記式質問紙調査。①従事者調査：病院等医療機関 3,213 機関から層別抽出した 545 機関に就業中の看護職員。②離職者調査：自治体施設窓口等における調査協力掲示に応じた離職中看護職員 150 名新人早期離職者および新人非早期離職者に該当した計 2,574 件が分析対象。多重ロジスティック回帰分析により要因「①新人時期の研修、②夜勤、③職場に対する適性自覚」と早期離職との関連をしらべた。

成績 新人早期離職との相関は、①院内・院外を問わず新人時期の研修受講者は早期離職する傾向が低かった。看護職専任研修担当者のいること自体は早期離職抑制因子ではなかった。②夜勤の早期開始、独り立ちするまでの夜勤回数に早期離職との関連は認められなかった。③新人時期に職場への不適性自覚や退職願望のある新人看護職員は早期離職する傾向が高かった。

結論 研究提供主体機関が研修充実策を工夫・整備できる支援策は効果的な早期離職防止策ひいては確保策につながる可能性があると思われた。看護職専任研修担当者は研修体制の質的充実に寄与する可能性があると考えられた転職・復職を望む職員のライフスタイルに合った職場紹介支援策に、最新の知識・技術の習得をしやすい支援策を併せるなどの施策が効果的と思われた。

キーワード： 新人看護職員、早期離職、東京都看護職員需要見通し策定、研修、夜勤、対職場適正自覚

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