DISCUSSION OF KEY SUCCESS FACTOR IN NURSE RETENTION IN MEDICAL INDUSTRY IN CHINA

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Abstract

The popularity of healthcare, the rapid population aging, the prevalence of chronic diseases and the complexity of clinical care in China have resulted in increasing medical service objects and illness seriousness. Nurses, as the first-line workers, bear the major responsibility to take care of patients, However, the turnover rate of nurses has been concerned as the high risks of nursing work, inadequate nursing manpower allocation, large job stress, and low social status. Medical industry in China is selected as the research object in this study. Tertiary first-class hospitals in Shanghai are sampled for the questionnaire analysis. Total 360 copies of questionnaire are distributed to the nurses, and 276 valid copies are retrieved, with the retrieval rate 77%. The research results show that *workplace culture* is the most emphasized dimension in hierarchy, followed by *operation simplification*, *mode change*, and *workplace respect* and top five indicators, among 14 evaluation indicators, are sequenced as nursing manpower management, return to profession, policy and regulation, contribution affirmation, and work simplification. According to the results, suggestions are eventually proposed, expecting to reinforce the construction of nurses, comprehensively enhance clinical nursing service.

Keywords: mode change, operation simplification, workplace respect, workplace culture

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Introduction

The popularity of healthcare, the rapid population aging, the prevalence of chronic diseases, and the complexity of clinical care in China have resulted in increasing medical service objects and illness seriousness. Nurses, bearing the major responsibility to take care of patients and being the first-line workers, present the highest proportion in medical manpower. Nurses used to be cultivated from novices to experts with adequate time; nevertheless, the increasing turnover rate has forced nursing novices to be independent earlier. In other words, nursing ability is the accumulation of work seniority and practical experience to train the complete clinical nursing practice. In this case, inadequate practical experience and uneven nursing ability to develop the profession ability at work are the factors in nurses reducing job satisfaction and affecting the nursing quality. For healthcare institutes, early leave of nurses causing constant novice training in workplaces would enhance training costs and clinical operation burden as well as increase the risk of care quality to directly endanger patients' safety.

Long-term high pressure, heavy workload, and unstable working hours have resulted in nurses' job dissatisfaction and high turnover rate; a lot of nurses do not even intend to involve in the workplace. Reducing retention rate of nurses in past years is related to insufficient manpower allocation, excessive workload, disproportional salary and work pay, not being respected and bad teamwork to cause decreasing job satisfaction and result in high turnover rate. Key factors in nurse retention in medical industry in China are therefore explored in this study. The research results are expected to have relevant medical sectors stress on such problems, improve nursing environment, and develop nursing ability to further enhance the nursing care quality of inpatients.

Literature review

Operation conditions in nursing industry

To comprehensively practice "Outline of China's Nursing Career Development Plan (2016-2020)" of National Health and Family Planning Commission of China for better planning and enhancing the development of nursing business in Shanghai, there were over 75.4 thousand nurses registered in Shanghai by 2015, which increased 35.24% compared to 2010. From the statistics of permanent residents, the number of nurses per thousand population enhanced from 2.43 in 2010 to 3.12 in 2015, the practicing (assistant) physician-to-registered nurse ratio increased from 1:1.09 in 2010 to 1:1.19 in 2015, and the doctor-nurse ratio in hospitals increased from 1:1.37 in 2010 to 1:1.5 in 2015. The doctor-nurse ratio in tertiary and secondary hospitals reached 1:1.54 and 1:1.49, respectively. In nurse teams, up to 67.12% nurses presented the education attainment above college,

where 14.5% nurses showed the education attainment above undergraduate. A group of high-education and high-quality nurses were in the clinical first-line to establish the solid basis of the development of nursing business and the technology of medicine science in the city. "Thirteen Five-Year Plan" is the critical phase and the tough time for deepening medical and health system reform in Shanghai City, and it is also to contribute to the promotion of Shanghai being a healthy city and the Asian medical central city. The major objectives are summarized as below: (1) To enhance nurses' professional quality and service ability; (2) To enhance the clinical nursing quality in medical institutes; (3) To optimize the occupational development environment for nursing; (4). To expand nursing service field.

Retention intention

Cook & Ashcroft (2015) referred retention intention to an individual, in consideration of the professional career development, being willing to retain in the original organization. Prabhu (2016) pointed out retention intention as an employee, after being in the organizational position, presenting belongingness and positive affirmation to the organization and work to retain in the original enterprise. Abdelhafiz, Alloubani, & Almatari (2015) pointed out retention intention as the strength of a worker being willing to continuously retain in the current working unit. Alghamdi & Urden (2016) regarded retention intention as an employee, after working in an organization or a unit, being willing to continuously stay in the organization or unit to strive for performance. Florea (2016) found out the positive effect of nurses' retention intention on the retention behavior and further indicated that work and supervisor satisfaction were the major predictors of nurses' retention intention. In this case, managers should understand the factors in nurses' retention, rather than simply caring about turnover rate, to retain nurses with strategies.

Factors in retention intention

Bleijenbergh, Gremmen, & Peters (2016) indicated that retention intention, compared to turnover intention, could better deduce the turnover behaviors of members in an organization or a unit. As retention intention did not simply pay attention to and concern about the retention of key human capitals in an organization, but emphasized the promotion of organizational members' positive work behaviors and attitudes, such as organizational commitment, striving for performance, and good organizational citizenship behavior. Alameddine *et al.* (2016) classified the factors in reducing employees' turnover rate and enhancing the retention intention into family factor, work environment, salary & welfare, supervisors' leadership style, and ineligible position. The research results revealed that the enhancement of employees' salary & welfare was the key tactic to retain excellent talents in the organization; furthermore, the changes of managers' attitudes, seeking for harmonious state between managers and employees in the

organization, and encouraging employees' work motivation and mind appeared the most direct effects on employees' retention. George (2015) also emphasized that nursing and medical service staff with higher education background showed fewer promotion opportunities in hospitals and lower retention intention; inflexible work or lack of learning and development potentials would enhance employees' turnover intention; and, high work pressure and low job satisfaction were also the key factors in low retention intention. Dessler (2016) stated that an organization had to establish a complete manpower allocation mechanism, encourage employees proposing improvement suggestions, reinforce employees' work autonomy, present complete education and training and provide on-job training, smoothen promotion channels, career development, and retention measure, and enhance employees' job satisfaction and reduce the work pressure to enhance employees' retention intention.

Key success factor

Alghamdi (2016) pointed out the most important competitive capabilities or competitive assets of an enterprise to cope with the competitors as the key success factors that an unsuccessful enterprise was normally lack of certain key success factors to develop the competitive advantages. Szalma (2014) regarded it as the technologies or assets to successfully compete with the competitors in specific industries. The match of the strengths of an enterprise with key success factors was analyzed to judge the competitiveness of the enterprise; when the strengths were performed on the key success factors in the industry, the enterprise could acquire competitive advantages. Alotaibi, Paliadelis, & Valenzuela (2016) proposed to review the resource conditions of the organization and take the unique resource conditions as the niche to design competition strategies which were not easily imitated by the competitors. Umamaheswari & Krishnan (2016) regarded key success factors as dynamic and changing with the goal of an enterprise that they were the essential conditions for the business success of an enterprise.

Research design and method

Delphi Method

The criteria for AHP dimensions are established with Delphi Method in this study. Delphi Method, also named expert survey, applies communication methods to deliver problems to experts individually, ask for opinions, and collect all experts' opinions for the comprehensive opinions, which are further feedback to the experts with predicted problems for further opinions. The experts would revise the original opinions, according to comprehensive opinions, which are further

collected. Repeating such steps for several times, a more consistent prediction result would be gradually acquired.

Establishment of evaluation indicator

The questionnaire is sent to the experts in various fields through email. The first feedback is to decide the factors in nurses' retention. Factors with similar properties are classified and returned to the experts for opinions. The final classification is made through several runs of email communication. The major categories are then determined by the expert conference to set the key success factors of mode change, operation simplification, workplace respect, and workplace culture in the retention of nurses in China. Finally, regarding such key factors as the AHP dimensions, the correspondent criteria are applied to establish the AHP questionnaire. The following research criteria are revised with Delphi Method: (1) Mode change: care mode, auxiliary manpower, flexible working hour, policy and regulation; (2) Operation simplification: return to profession, work simplification, working hour review; (3) Workplace respect: positive value, emotion management, interpersonal relationship, contribution affirmation; (4) Workplace culture: cross-team education, leadership trait, nursing manpower management.
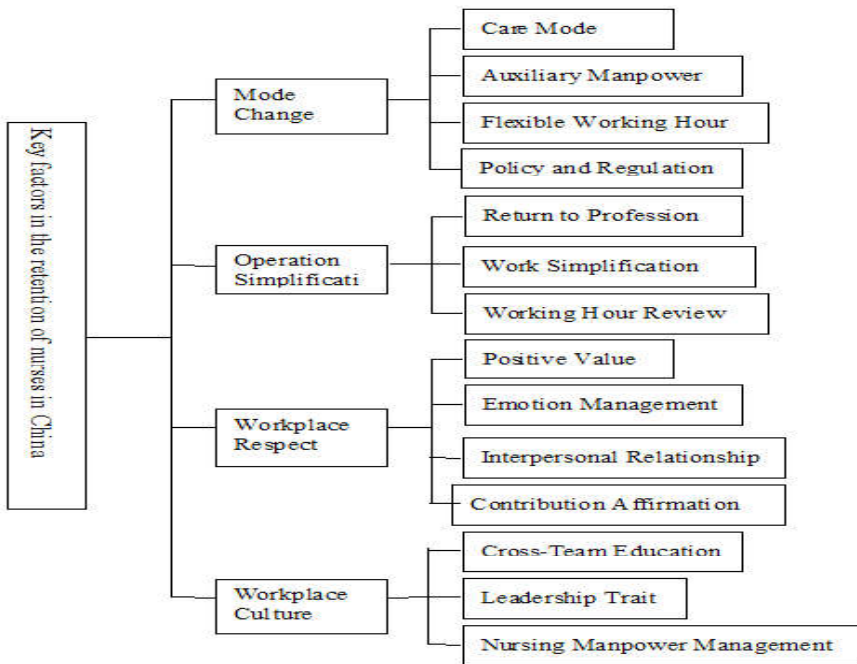

Figure 1: Research structure after the revision with Delphi Method.

Research object

Medical industry in China is the research object that tertiary first-class hospitals in Shanghai are sampled for the questionnaire analysis. Total 360 copies of questionnaire are distributed to the nurses in the hospitals, and 276 valid copies are retrieved, with the retrieval rate 77%.

Results

After completing the weights of all hierarchies, the allocation is based on the relative importance of evaluation indicators to present the importance of factors in the entire evaluation system and to generate the overall weight of the factors in the retention of nurses in China, *Table 1*.

Table 1: Overall weight of factors in nurse retention in China

Dimension	Hierarchy 2 weight	Hierarchy 2 sequence	Indicator	Overall weight	Overall sequence
Mode Change	0.228	3	care mode	0.058	10
			auxiliary manpower	0.034	14
			flexible working hour	0.071	7
			policy and regulation	0.095	3
Operation Simplification	0.273	2	return to profession	0.106	2
			work simplification	0.083	5
			working hour review	0.046	13
Workplace Respect	0.183	4	positive value	0.062	9
			emotion management	0.053	11
			interpersonal relationship	0.049	12
			contribution affirmation	0.087	4
Workplace Culture	0.316	1	cross-team education	0.077	6
			leadership trait	0.065	8
			nursing manpower management	0.114	1

Conclusion

According to the empirical analysis, the following conclusions are summarized. "*Workplace culture*", with the weight 0.316, about 31.6% of overall weight, is the mostly emphasized dimension, followed by "*operation simplification*" (weighted 0.273), "*mode change*" (weighted 0.228), and "workplace respect" (weighted 0.183). Accordingly, workplace culture is the mostly emphasized dimension for the retention of nurses in China.

Among the evaluation indicators in Hierarchy 3, the weights are sequenced as below: (1) Under mode change, the evaluation indicators are sequenced policy and regulation, flexible working hour, care mode, and auxiliary manpower; (2) Under operation simplification, the evaluation indicators are ordered return to profession, work simplification, and working hour review; (3) Under workplace respect, the evaluation indicators are sequenced contribution affirmation, positive value, emotion management, and interpersonal relationship; (4)Under workplace culture, the evaluation indicators are ordered nursing manpower management, cross-team education, and leadership trait.

By organizing the overall weight of evaluation indicators of key success factors in the retention of nurses in China, top 5 emphasized indicators, among 14 evaluation indicators, are nursing manpower management, return to profession, policy and regulation, contribution affirmation, and work simplification.

Suggestion

Based on the conclusions, the following suggestions are proposed in this study for a definite guide and direction for the retention of nurses in China.

Complete the classification management system of nurses in hospitals and enhance nurses' initiative to promote the education attainment. Although classification management systems of nurses are promoted to domestic hospitals, a lot of hospitals could not really practice the classification management of nurses. An effective classification management system in a hospital could reflect the value of nurses, guarantee the quality of nurses, completely develop the function of nurses, and transfer nurses' initiative to promote education attainment.

Complete vocational education systems provide essential conditions for improving the structure of education attainment. An academic system conforming to vocational education characteristics is established to gradually establish the basic education for secondary and vocational schools and undergraduate, the graduate education for postgraduate students, and the vocational education system for adults' higher education, continuous education, and self-learning.

Establish talent needs prediction system based on big data technology. The establishment of monitoring and prediction mechanism for technological talent needs could provide reference for skilled talents. With the cooperation of education, people's communes, National Health and Family Planning Commission, and industry associations to collect, analyze, and share the supply and demand information of nursing talents and focus on the development trend of nursing, reasonable statistics is applied to predict the total quantity and level of nursing talents within a period of time in the future.

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