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Research on the Effect of Nurses' Organizational Atmosphere on Perceived Professional Benefits

Suhuan Xu[1], Xin Dan[1], Ruonan Hou[1], Changde Jin[1], Jingying Liu[1], Hongwen Ma[2, *]

[1]School of Nursing, Tianjin University of Traditional Chinese Medicine, Tianjin, China

[2]Digestive Department, Tianjin Union Medical Center, Tianjin, China

Email address:
geilivablemhw@126.com (Hongwen Ma), XSH1962742629@163.com (Suhuan Xu)

*Corresponding author

Abstract: To analyze the effect of nurses' organizational atmosphere on perceived professional benefits. A total of 436 nurses in five grade A hospitals in Tianjin received survey by applying self-designed basic demographic questionnaire and Perceived Organization Atmosphere Scale and Perceived Professional Benefits Scale. The average total score of perceived organizational atmosphere and perceived professional benefits was (3.38±0.54), (4.38±0.58) respectively. The organization atmosphere was statistically positively correlated to perceived professional benefits (0.581~0.710, P<0.01). Adequate resources, team behavior, quality control and evidence-based nursing support explained 51.3% of the total variation of nurses' perceived benefits by hierarchical regression. The study showed that nurses' perceived professional benefits were at the median level in the scales and has room to improve. The strategies and measures should be adopted in order to improve organizational atmosphere and enhance the nurses' sense of professional benefits, which could be useful to nursing team stability.

Keywords: Nurses, Organizational Atmosphere, Perceived Professional Benefits

1. Introduction

With global shortage of nurses [1], accelerating process of aging [2-3] and the increase of people health needs, nurses have a series of problems, such as pressure [4], job burnout [5-6] and even left [7], which are not conducive to the physical and mental health of nurses and hospital's nursing quality improvement [8-9] and stability of the nursing team. To improve this situation, some scholars, based on the perspective of positive psychology, put forward the concept of "the sense of nurse's perceived professional benefit"[10], namely the nurse perceive professional harvest and bring their own benefits in the process of working, approve nursing that can promote the overall growth of the self, which is the intrinsic motivation of professional development. Nurses organizational climate [11] refers to the characteristics of the social environment and the organization of working conditions, such as decision-making, leadership, work standards, which is the reflection of a potential principles

values, beliefs, organizational culture factors within a particular organization.

2. Significance of the Study

Some researchers have suggested, the nurse professional benefit sense should be considered comprehensively from individual and organizational level. However, at present, a lot of research focused on the individual level, such as the nurse professional self-concept [12], nurses professional identity [13]. Therefore, from the organization aspect, the study was to investigate the status of nurse's organizational climate and sense of professional benefit, as well as analyze influence of organizational climate on professional sense of benefit. And then, provide guidance to clinical staff for improving nurse's benefit, stable nursing team.

3. Research Question

This study can address the following questions:

What is organizational atmosphere in hospital?

What is the nurse's professional benefits?

What is the relationship between organizational atmosphere and nurse's professional benefits?

4. Aim

Survey the level of the nurse's professional benefits and realize the factors impacted the nurse's professional benefits, so as to generate strategy and take the measures for maintaining the stability of nursing staff.

5. Objectives

1. Assessment the level of the nurse's professional benefits.
2. Realize the factors impacted the nurse's professional benefits.
3. Illustrate the relationship between organizational atmosphere and nurse's professional benefits.

6. Method

6.1. Research Design

The study's design is descriptive, cross-sectional study, which is quantitative correlation.

6.2. Settings

This study was carried out at five hospitals: Tianjin Union Medical Center, Tianjin Hematonosis Hospital, Tianjin Eye hospital, Tianjin Infectious Disease Hospital and Tianjin General Hospital. Surveyed hospitals all are Grade-A hospitals.

6.3. Sampling

A total of 436 nurses were investigated on social condition, organizational atmosphere and perceived professional benefits and by layer cluster sampling.

6.3.1. Inclusion Criteria

If nurses want to be surveyed, they must be meeting the following conditions, including (1) the registered nurse; (2)The work time is more than one year in the present hospital; I (3) Work time is more than half a year in the department; (3) Participate voluntarily in this study.

6.3.2. Exclusion Criteria

The exclusion criteria are as follows.

(1) Nursing managers and decision makers (nurses' perception of organizational climate comes mainly from the behavior of nursing management and decision-makers);

(2) Don't attend this research who engage in further education, take sick leave or maternity leave.

6.4. Instrument

6.4.1. General Condition Questionnaire

This questionnaire was designed by the research team members based on documents and materials, including: gender, age, working years, department, average night shift frequency, marital status, educational condition professional title, personnel status, monthly income, clinical teaching and scientific research.

6.4.2. Organizational Climate

Nurse's Organizational Climate Perception Scale was assessed organizational climate, which was developed based on the organization overall atmosphere model by Ye [11]. It is consists of six dimensions: team behavior (8 items), quality management (4 items), management support (9 items), evidence-based nursing support (2 items), human resources management (4 items) and resource guarantee (10 items) and includes 37 items. All the items are rated on a 4-point sale with1="strongly disagree" to 4 = "strongly agree", total score is among $37 - 148$. Higher scores show better organizational climate perceived. The content validity of the total scale was 0.95, the Cronbach's alpha was 0.939, and the retest reliability was 0.813. In this study, the Cronbach's alpha coefficient of the scale was 0.887.

6.4.3. Nurse's Perceived Professional Benefit

Nurse's Professional Benefit Scale was used to measure the level of nurse's professional benefit in their organization. It is a self-report questionnaire that measures five dimensions: positive occupational perception (7 items), harmonious relationship between nurses and patients (6 items), identification of relatives and friends (6 items), team belonging (6 items), self-growth (8 items) and total 33 items. Each item is scored on 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). The total score is among 33-165. Higher scores represent professional sense of benefit. The content validity of the scale was 0.70~1.00, the total Cronbach's alpha coefficient was 0.958[14]. In this study, Cronbach's alpha coefficient was 0.935.

6.5. Research Process

With the approval of the hospital manager, researcher unified training explain the research for participations, including aim, fill method, the matters needing attention. All participators spent 5 ~ 10 min to fill out questionnaire independently. And then, the questionnaire was withdrawn on the spot.

6.6. Ethical Consideration

The study was no harm and anonymous for nurse, and participation was voluntary. The ethical approval for this survey was obtained from ethical Committee of Tianjin Union Medical Center.

6.7. Data Analysis

SPSS17.0 was used for statistical analysis. The counting data and the measurement data are expressed by frequency and percentage, mean and standard deviation respectively. One-way ANOVA tests, t test was used to assess the relationship between professional benefit of nurses and

demographic characteristics (P＜0.05); Pearson correlation or Spearman correlation was used to explore the correlation between nurses' organizational climate and occupational benefit. Hierarchical regression was used to analyze the influence of different dimensions on occupational benefit of nurses (P＜0.05).

7. Results

A total of 460 questionnaires were issued and 450 were recovered. Finally, 436 valid questionnaires were obtained by excluded the questionnaires that missing data >5% or the important missing information was missed. The effective recovery rate was 96.89%. Of the 436 respondents, most of them were female (95.64%). 30.73% had bachelor's degree and above and 47.71% had been senior nurse. Age: 21~25 years old 30, 25~29 years old 133, 30~39 years old 151, 40~49 years old 100, 50~54 years old 22.

7.1. Total Score of the Nurses' Professional Benefit and the Scores of Each Dimension

The average score of professional benefit of nurses are (4.38±0.58), and the average score of dimension item form the high to low is: self-growth (4.54±0.60), group belonging (4.48±0.62), harmonious relationship (4.46±0.63), family and family identity (4.2±0.75), positive occupational perception (4.25±0.68). As shown in table 1.

Table 1. *Total score of the nurses' professional benefit and the scores of each dimension.*

Dimension	Total scores	Dimension scores	Average scores	Rank
Positive professional perception	7~35	29.78±4.79	4.25±0.68	4
Good patient-nurse relationship	6~30	26.75±3.78	4.46±0.63	3
Recognition from families and friends	6~30	21.47±3.74	3.58±0.62	5
Sense of belonging to work team	6~30	26.85±3.74	4.48±0.62	2
Personal growth	8~40	36.03±4.81	4.54±0.60	1
Perceived professional benefits	33~165	144.5±19.24	4.38±0.58	

7.2. Comparison of Professional Benefit of Nurse Different Demographic Characteristic

The influence of demographic characteristic on the nurse's professional sense of benefit were analyzed, the results show that there was a statistically significant difference between the nurses' professional benefit and different demographic characteristic, including working time (F = 3.650, P = 0.023), departments (F = 5.672, P = 0.000), average number of night shifts (F = 3.638, P =0.026), marital status (F = 1.983, P = 0.048), personnel situation (F = 5.272, P =0.000), income (F = 2.534, P =0.038), clinical teaching (t = 1.140, P = 0.001), research participation (t =2.132, P =0.041). As shown in table 2.

Table 2. *Comparison of Nurse's professional benefit of different demographic data nurses.*

Variable	N	Mean ± SD	F/t	P
1. Working time (year)			3.650	0.023
1~	126	146.13±17.21		
5~	104	144.48±20.00		
10~	129	142.80±20.45		
20~32	77	145.21±18.95		
2. Department			5.672	0.000
Internal medicine department	155	140.17±22.64		
Surgical department	119	143.24±20.99		
ICU	80	145.30±17.68		
Operating room, Outpatient department, Ophthalmology	82	153.73±22.38		
3. Average number of night shifts (frequency /month)			3.638	0.026
None	164	145.68±16.97		
1~	60	145.62±19.66		
5~	119	143.82±20.31		
≥10	93	138.76±20.52		
4. Marital status			1.983	0.048
Single, Divorce or other	126	147.18±17.96		
Married	310	143.41±19.76		
5. Personnel situation			5.272	0.000
Temporary employment	26	144.06±19.40		
Contractual system	73	145.56±18.31		
Authorized strength	337	151.50±20.60		
6. Income (yuan/month)			2.534	0.038
1000~	22	141.71±18.50		
2000~	18	143.60±17.56		
3000~	41	144.05±23.49		
≥4000	355	148.35±18.63		
7. Clinical teaching			3.526	0.001

Variable	N	Mean ± SD	F/t	P
No	349	143.68±20.03		
Yes	87	146.10±21.02		
8. Research participation			2.132	0.041
No	370	143.50±18.05		
Yes	66	147.32±20.30		

7.3. The Total Score of Nurse' Organization Atmosphere and Each Dimension Score

According to the survey, the average score of nurse's perception of organizational climate are (3.38±0.54), the average score of dimension item form the high to low is: team behavior (3.58±0.50), quality management (3.50±0.57), evidence-based nursing support (3.45±0.69), management support (3.44±0.54), human resource management (3.24±0.72), resource guarantee (3.16±0.71). Three items with lower scores of resource protection are "salary satisfaction" (2.92±0.94), "hospital security that medical staff personal safety is not threatened" (3.06±0.95), "nursing staff actively participate to cost control" (3.11±0.86). As shown in table 3.

Table 3. Total score of nurse' organization atmosphere and each dimension score.

Dimension	Total scores	Dimension scores	Average scores	rank
Resource guarantee	10~40	31.64±7.09	3.16±0.71	6
Team behavior	8~32	28.67±3.97	3.58±0.50	1
Management support	9~36	30.96±4.89	3.44±0.54	4
Quality management	4~16	14.00±2.27	3.50±0.57	2
Human Resource Management	4~16	12.95±2.87	3.24±0.72	5
Evidence-based nursing support	2~8	6.90±1.37	3.45±0.69	3
perceived organizational atmosphere	37~148	125.13±20.08	3.38±0.54	

7.4. The Correlation Between Organizational Climate and Professional Benefit of Nurses

In this study, the organizational atmosphere of the nurses and the sense of occupational benefit were positively correlated (r=0.581~0.710, P<0.01). Shown in table 4.

Table 4. The correlation between nurse organizational climate and perceived professional benefit of nurses.

Dimension	Perceived professional benefits	Positive professional perception	Good patient-nurse relationship	Families and friends' Recognition	Work team belonging Sense	Personal growth
Perceived organizational atmosphere	0.710	0.714	0.587	0.589	0.679	0.598
Adequate resources	0.639	0.653	0.524	0.552	0.568	0.522
Team behavior	0.609	0.562	0.535	0.461	0.644	0.554
Management support	0.671	0.678	0.555	0.552	0.658	0.554
Quality management	0.671	0.673	0.527	0.553	0.659	0.596
Human Resource Management	0.581	0.612	0.472	0.501	0.525	0.459
Evidence-based nursing support	0.622	0.644	0.501	0.507	0.600	0.529

All P<0.05.

7.5. The Effect of Nurses' Organizational Atmosphere on Perceived Professional Benefits

Considering the demographic data influenced nurses' professional benefit, this study controlled demographic variables and analyzed the influence of organizational climate on nurses' professional benefit. So this study considered nurse's professional sense of benefit as the dependent variable, meaningful general demographic data (working age, department, average monthly shift frequency, marriage, personnel status, monthly income, clinical, teaching and scientific research to participate in) as the independent variable into the layer 1, different dimensions of nurse's perceived atmosphere as the independent variables into the layer 2. After that, hierarchical regression analysis was performed. The results showed that resource security, team behavior, quality management, and evidence-based nursing support independently accounted for 51.3% of the nurses' sense of professional benefit. As shown in table 5.

Table 5. Organizational climate of nurses is gradually regression analysis on the stratification of nurses' professional benefit.

Independent variable	Regression coefficient	SE	Standardized regression coefficient	t	P
First layer					
Department	3.691	1.796	0.179	2.055	0.041
Clinical teaching	3.753	1.504	0.133	2.495	0.013
Research participation	6.465	0.998	0.265	6.475	0.000
Second layer					

Independent variable	Regression coefficient	SE	Standardized regression coefficient	t	P
Adequate resources	0.491	0.196	0.181	2.511	0.012
Team behavior	0.603	0.283	0.124	2.130	0.034
Quality management	1.694	0.661	0.200	2.563	0.011
Evidence-based nursing support	1.792	0.861	0.128	2.081	0.038

First layer :R2=0.022，F=17.38， P<0.01；Second layer: R2 =0.535，△R2 =0.513 ，F=28.46，P<0.01.

8. Discussion

8.1. Nurses' Organizational Atmosphere

Organization atmosphere is member's common recognition of working environment and a set of organization characteristics influenced members, which can be directly or indirectly perceived by the members of organization, as well as impact on motivation and behavior of members [7]. In this study, the organization atmosphere of nurses (3.38 + 0.54) was in the middle level and there was a large room for improvement. There are six dimensions in the nurse's organizational atmosphere, and the team behavior score (3.58 + 0.50) was the highest, which may be related to the job nature and work experience of the nurse., medical workers need to be consistent in their goals, and cooperate with each other in rescuing patients. At the same time, with the introduction of the concept of "magnetic" hospital, nursing managers also pay more and more attention to nursing staff team and the humanities spirit. In addition, resource guarantee score (3.16 + 0.71) was the lowest score (3.16 + 0.71), the results [14] are basically consistent with the national nurses working status in 2016. [15], which indicated the resources required to reward, nurse's work, in the work of security, autonomy, and the lack of participation in management is a nurse perception of the main causes of poor organization atmosphere. Managers can through the establishment of reasonable compensation system, to ensure that nurses have opportunities to be involved in hospital management and policy making and create a safe working environment and with sufficient personnel to improve security and so on ways to improve the status quo of the nurse.

8.2. Nurses' Perceived Professional Benefits

The results of this survey showed that the total average score of the nurses' professional benefits (4.38 + 0.58) was at the middle level. Studies have shown that the professional benefit sense of nurses is an important reason that affects the enthusiasm of work, job burnout and the willingness of nurses to stay. [16] Therefore, in the situation of increasing aging and shortage of nurses, it is of vital importance to improve nurses' professional benefit and stabilize nursing team. Mao B. J [16] trying to "change bad nurse career awareness, and guide nurse active professional emotional experience" as the theme using the forms such as lectures, discussions, feedback to the nurse cognitive intervention achieved significant effect. "Based on" professional self-concept mediation model.

8.3. Effect of Nurses' Organizational Atmosphere on Perceived Professional Benefits

This study found that the sense of nurse's professional benefit was positively correlated with the organizational atmosphere and all dimensions (all P<0.01), indicating that the better the organization atmosphere of nurses, the stronger the professional benefit. The manager should create a good organizational atmosphere from the aspects of manpower and policy, and increase the nurse's professional benefit sense. In addition, a good organizational climate can help nurses realize their own value [17] and personal growth in order to enhance their sense of accomplishment. However, the realization of the nurse's own value and personal growth are also important factors for the professional benefit.

Hierarchical regression results suggested (see chart 6) resources safeguard, team behavior, quality management, and evidence-based nursing can explain 51.3% of the total variance of nurse's professional benefit, indicating the organization's resources, team behavior, quality management, and evidence-based nursing support is important factors affecting nurse's sense of professional benefit. Resources safeguard include available job resources (knowledge, skills, development opportunities, etc.), economic compensation, the feeling of work security and autonomy, etc. Team behavior is that nurse communicate and cooperate with each other to achieve the work objectives, including cooperation and agreement. Quality management is The hospital attaches importance to nursing quality management, for example, hospital actively implement quality control plan and has many ways to make problems timely reported, nursing manager listens attentively to the nurse's feedback during the nursing quality control process. Evidence-based nursing support, such as the hospital's training of literature inquiry knowledge, and medical-care related literature for inquiry. The above aspects reflect the maintenance of the interests for the nursing staff, the support of the work, the respect of the personality and the guarantee of resources. According to the theory of justice, when nurse's perception of above four aspects, professional benefits sense has increase. When the benefit is higher than its investment in career, nurse will try to improve the professional inputs, which form a virtuous circle. Therefore, the hospital should actively provide the nurses with career development opportunities and work resources, regularly conduct literature inquiry knowledge training and formulate a reasonable salary system and security policy. At the same time, the hospital also attaches great importance to the nursing quality management, such as implement of quality control plan, many channels to inform the nursing, nursing quality, listen to nurse's feedback in the

nursing quality control process.

9. Conclusion

This study shows that Grade- A hospital nurses sense of benefit in upper level, organizational climate and has close ties to the sense of professional benefit. Departments, clinical teaching, scientific research participation, resource guarantee, quality management, team behavior and evidence-based nursing support are influence factors of sense of nurse's professional benefit. Managers from the above aspects to take measures to establish the reasonable compensation system, create a safe working environment and ensure adequate staffing. In addition, hospital should pay attention to the autonomy and influence of nursing staff, participation in management and the rights of the continuing education training. Finally, managers are supposed to create an equality, open, sharing, warm atmosphere for care workers so as to increase their sense of professional benefit, and then stable care team.

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