ปัจจัยที่มีความสัมพันธ์กับเอกสิทธิ์วิชาชีพในการปฏิบัติการพยาบาลของพยาบาลที่โรงพยาบาลมหาวิทยาลัยแห่งหนึ่งในประเทศเวียดนาม*

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บทคัดย่อ

การวิจัยเชิงบรรยายครั้งนี้มีวัตถุประสงค์เพื่อศึกษาระดับของเอกสิทธิ์วิชาชีพและปัจจัยที่มีความสัมพันธ์กับเอกสิทธิ์วิชาชีพในการปฏิบัติการพยาบาลของพยาบาล จำนวน 180 คน ในแผนกผู้ป่วยในโรงพยาบาลการแพทย์และเภสัชกรรมของมหาวิทยาลัยเว้ โดยใช้แบบสอบถามที่ได้รับการแปลจากภาษาอังกฤษเป็นภาษาเวียดนามด้วยกระบวนการแปลย้อนกลับ ผลการวิจัยพบว่า เอกสิทธิ์วิชาชีพในภาพรวมและรายด้านอยู่ในระดับปานกลาง พยาบาลในแผนกที่ทำงาน จำนวนปีที่ทำงานเป็นพยาบาลเวชปฏิบัติ จำนวนปีที่ทำงานโรงพยาบาลมหาวิทยาลัยเว้ต่างกัน และประเภทของเวรที่แตกต่างกัน มีเอกสิทธิ์วิชาชีพแตกต่างกัน การประสานงานระหว่างแพทย์และพยาบาลและสิ่งแวดล้อมในการปฏิบัติการพยาบาลด้านการพัฒนาวิชาชีพ ด้านการสนับสนุนทางการบริหาร และด้านภาระงาน มีความสัมพันธ์กับเอกสิทธิ์วิชาชีพอย่างมีนัยสำคัญทางสถิติ ข้อเสนอแนะต่อผู้บริหารการพยาบาลคือควรเพิ่มสมรรถนะของพยาบาลในการประสานงานกับแพทย์และปรับปรุงสิ่งแวดล้อมในการปฏิบัติการพยาบาลเพื่อช่วยให้พยาบาลมีเอกสิทธิ์วิชาชีพเพิ่มขึ้น

คำสำคัญ: เอกสิทธิ์วิชาชีพ การปฏิบัติการพยาบาล เวียดนาม

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Factors related to professional autonomy in nursing practice of nurses at a university hospital in Vietnam*

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Abstract

The aims of this descriptive study were to explore the level of professional autonomy and to investigate factors related to professional autonomy in nursing practice of 180 nurses in the in-patient departments at Hue University of Medicine and Pharmacy Hospital. The data were collected by using a questionnaire translated from English to Vietnamese language by back translation process. The findings indicated that the overall and each domain of professional autonomy of nurses were at moderate levels. Nurses who worked in different settings, years of experience as nurse practitioners, years of experience at the current jobs, and type of shift had different professional autonomy. Nurse-physician collaboration and nursing practice environment related to professional development, management support, and workloads had statistically significant correlation with professional autonomy. Recommendations for nurse administrators are increasing nurses' competencies in collaboration with physicians and improving nursing practice environment in order to enhance professional autonomy of nurses.

keywords: professional autonomy; nursing practice; Vietnam

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Introduction

Professional autonomy is a concept that expresses self and rules in the job. Autonomy is independence, liberty, and self-regulation.[1] Professional autonomy in nursing practice is having the authority to make decisions and the freedom to act with one's professional knowledge base within legal and regulation of practice scope. It is defined as an essential aspect of a positive work environment and is attributed to enhanced outcomes in patients, nurses, and organizations.[2] Professional autonomy had four dimensions: readiness, empowerment, actualization, and valuation.[3] It linked to high satisfaction for nurses and patients, high quality safe of patient care, decrease the cost of care, low mortality in patients, higher rescue success[4], stable human resources in the nursing profession and nursing moral return reflectively positively on and influence the retention of nurses.[5,6,7] Previous studies revealed that some personal characteristics of nurses were associated with professional autonomy in nursing practice such as age, gender, working experience, employee position, practice setting, education, collaboration between nurse and doctor, and working environment.[4,8-16]

Hue University of Medicine and Pharmacy Hospital is a 700 bed first class hospital in Vietnam and it belongs to Hue University of Medicine and Pharmacy (HUMP). The doctors are mainly lectures of the HUMP so they have high academic titles, years of experience, and high education degrees and levels. The total number of nursing personnel is 280 including nurses, midwives, and technician title. Most of nurses are young with ages under 40 years and have bachelor degree. Therefore, there is the deep different degrees between doctors and nurses. Besides, the opportunity of nurses to participate in training programs is limited. In addition, the dependent function of nurses at HUMP Hospital is still dominant and independent role in patient care with nursing process is not highly appreciated. All of these issues impact nurses and patients. Nurses' capacity is limited and is not highly appreciated due to nurses don't have power or complete ability to make a decision or discuss to doctors about a patient because of lack of knowledge and confidence.

The professional autonomy in nursing practice at HUMP has not been explored through any researches yet. The researcher would like to conduct this study to explore what is the level of professional autonomy in nursing practice of nurses at HUMP Hospital and its related factors. The study results will help nursing administrators to find out the solutions to improve professional autonomy in nursing practice to enhance patient outcomes and quality of care.

Objectives of the study

1. To explore the level of professional autonomy in nursing practice of nurses at Hue University Hospital.
2. To investigate factors related to professional autonomy in nursing practice of nurses at Hue University Hospital.

Material and methods

Study design and population: This descriptive correlational and cross-sectional study was conducted in total population of 180 registered nurses who worked at in-patient departments of Hue University of Medicine and Pharmacy hospital in Vietnam. All nurses were both head nurses and

staff nurses. Nurses who had less than one year of working experience and worked in out-patient departments were excluded.

Instrument: Data were collected using a questionnaire which was made up of the following sections:

Demographic data. This section referred to variables about age, gender, level of education, employee position, department/ specific area of working, monthly income, working experience (years worked as a nurse practitioner, years worked at current job), type of shift, a number of shifts, ratio of nurse to patient, and continuous training.

Dempster Practice Behavior Scale (DPBS). The researcher used Dempster Practice Behavior Scale (DPBS) developed by Dempster[3] to measure professional autonomy in nursing practice. The DPBS included 30 items and was divided into four subscales: readiness (11 items), empowerment (7 items), actualization (9 items), and valuation (3 items). This scale was a 5-point Likert-type response format ranging from 1 (not at all true) to 5 (extremely true). According to Amini et al.,[11] the level of each subscale was interpreted by the ranges of mean scores. For the readiness subscale, the score from 11 to 25 was defined as low readiness, from 26 to 40 as moderate readiness and from 41 to 55 as high readiness. For the empowerment subscale, the score from 7 to 16 indicated low empowerment, between 17 and 26 was moderate and from 27 to 35 was high empowerment. For the actualization subscale, score from 9 to 20 as low actualization, from 21 to 32 as moderate and from 33 to 45 as high actualization. For the valuation subscale, score between 3 and 7, 8 - 11 and 12 - 15 was considered low, moderate and high valuation, respectively. Reliability analysis in this study was evidenced by a Cronbach's alpha of 0.95.

Collaboration and Satisfaction About Care Decisions Scale (CSACD). This section measured nurse-physician collaboration. It was developed by Baggs et al.[17] and was made up of 10 items: six items focused on critical attributes of collaboration, two items were global questions on collaboration, and two items measured satisfaction with decision-making. This scale was a 7-point Likert scale ranging from 1 (strong disagree) to 7 (strong agree). Total scores ranged from 7 to 70. The mean score of CSACD from 7 to below 35 was interpreted as low, from 35 to below 52.5 as moderate and from 52.5 to 70 as high.[14]

Brisbane Practice Environment Measure (B-PEM). Nursing practice environment was measured using Brisbane Practice Environment Measure (B-PEM)[18] which was designed to measure five domains: professional development (9 items), management support (8 items), out of depth (4 items), workload (3 items), and roasting (4 items). The total 28 items were rated on a 5-point Likert scale ranging from 1 (never) to 5 (always). The highest mean score was 5.00 and the lowest mean score was 1.00. The level interpretation was categorized by using the following formula for a 5-point Likert Scale of Pilot & Hungler.[19] The values below 2.33, from 2.33 to 3.67, and above 3.67 was considered as a low, moderate, and high level, respectively.

Validity and reliability: The DPBS, CSACD and B-PEM were translated into Vietnamese language. The translation process followed the recommended translate and back-translated method by Cha, Kim, and Erl.[20] The Vietnamese translated

versions of DBPS, CSACD, B-PEM were pilot tested on 30 nurses who worked at Hue Central hospital where had the same context as nursing work at Hue University of Medicine and Pharmacy hospital. Cronbach alpha coefficients of each instrument were 0.83 (DPBS), 0.85 (CASCD), and 0.90 (B-PEM), respectively, which demonstrated acceptable internal consistency.[21]

Data collection: After approving from the Khon Kaen University Ethics Committee for Human Research, Thailand, the Institutional Ethics Committee of Hue University of Medicine and Pharmacy, Vietnam and the permission from Hue University of Medicine and Pharmacy Hospital, the questionnaires were distributed by the principal investigator through repetitive visits to the participating units, after the researcher introduced and explained to nurses in each in-patient department about the purpose and process of the study. A total of 180 completed questionnaires were returned by individually to the box in each unit (100% response rate).

Data analysis: Data analysis was performed using the Statistics Package for Social Sciences (SPSS) (version 20.0). Descriptive statistics for all study variables were computed. The differences in professional autonomy of nurses with different general characteristics were analyzed by using ANOVA and T-test, environment, and nurse-physician collaboration were analyzed by using Pearson's correlation. The following is the interpretation of the strength of a correlation[22]

0.90 to 1.00	Very high correlation
0.70 to 0.89	High correlation
0.50 to 0.69	Moderate correlation
0.30 to 0.49	Low correlation
0.00 to 0.29	Little if any correlation

Findings

Sociodemographic characteristics of the respondents. From 180 respondents, 169 were female (93.9%). Majority of respondents (47.8%) were under 30 years of age. Most (55.6%) had a college level of education and worked as staff nurse (92.8%) in surgical-oncology-ENT setting (35.6%). One hundred and twenty-nine respondents (71.7%) had averaged income of 301.30 US dollars per month. Regarding experience, most of respondents (38.9%) had 6-10 years of experience working as an NP and working at current job in day and night shifts (84.5%). From 152 respondents, 113 worked 2 shifts per week (62.8%). One hundred and one respondents (56.2%) from 169 reported the ratio of nurse to patient which was one nurse to more than eight patients. One hundred and eight of respondents (60%) had participated less than five continuous training programs.

Levels of professional autonomy, nurse-physician collaboration, and nursing practice environment. The overall mean score of professional autonomy was 98.15 (SD. = 10.52) and all four domains of professional autonomy were at moderate levels. The overall averaged score of nurse-physician collaboration and nursing practice environment were at moderate levels (mean = 51.95, SD. = 10.41 and mean = 3.57, SD = 0.44, respectively). All domains of nursing practice environment were also at moderate levels except the domain of management support was at a high level (mean = 3.84, SD = 0.53) (Table 1).

The association between professional autonomy and personal characteristics, nurse-physician collaboration, and nursing

practice environment. Professional autonomy of nurses who worked in different settings, had different years of experience as an NP, had different years of working at current job, and Wof shift were statistically different (p<.05) (Table 2). Professional autonomy was related to nurse-physician collaboration (r= 0.37, p<.05) and nursing practice environment (r= 0.23, p<.05). The domains of nursing practice environment regarding professional development, management support, and workload had statistically positive correlations with professional autonomy (r=0.27, 0.17, 0.20) (p<.05) However, all relationships were not strong (Table 3).

Table 1 Levels of professional autonomy, nurse-physician collaboration, and nursing practice environment of nurses (N = 180)

Variables	Mean	SD	Level
Professional autonomy	**98.15**	**10.52**	**Moderate**
- Readiness	38.04	5.43	Moderate
- Empowerment	19.53	1.94	Moderate
- Actualization	29.66	4.62	Moderate
- Valuation	10.92	1.97	Moderate
Nurse-physician collaboration	**51.95**	**10.41**	**Moderate**
Nursing practice environment	**3.57**	**0.44**	**Moderate**
- Professional development	3.58	0.51	Moderate
- Management support	3.84	0.53	High
- Out of depth	3.11	0.65	Moderate
- Workload	3.30	0.56	Moderate
- Roasting	3.17	0.53	Moderate

Table 2 Differences of professional autonomy among personal factors (N = 180)

No	General characteristics	Mean	SD	P-value	
				T-test	F-test
1	Age <30	98.09	10.83		
	30-40	98.36	10.21		0.92
	>40	96.90	10.60		
2	Gender			0.89	
	Male	99.91	9.39		
	Female	98.04	10.60		
3	Level of education				0.10
	Bachelor	96.04	11.49		
	College	98.38	10.01		
	Diploma	101.25	9.88		

Table 2 Differences of professional autonomy among personal factors (N = 180) (cont.)

No	General characteristics	Mean	SD	P-value	
				T-test	F-test
4	Position			0.08	
	Staff nurse	97.81	10.72		
	Head nurse	102.46	6.27		
5	Practice setting				0.00*
	Internal Medicine, Pediatric	98.35	9.56		
	Surgical, Oncology, ENT	96.27	8.67		
	Emergency, Recover room, ICU, DSA	93.94	11.90		
	Labor room, Neonatal, Intensive care	104.77	11.15		
	Operation Room	99.64	8.35		
6	Income average per month (USA dollar)			0.86	
	< 304	98.31	11.36		
	≥ 304	98.04	9.94		
7	Years worked as an NP				0.01*
	1-5	95.00	11.95		
	6-10	99.77	9.86		
	>10	99.85	8.56		
8	Years worked at current job				0.04*
	1-5	95.65	11.70		
	6-10	99.87	9.84		
	>10	99.33	8.90		
9	Type of shift				0.04*
	Only day shift	99.68	6.83		
	Combination (day and night)	98.50	10.92		
10	Shift per week				0.20
	01 shift per week	92.67	9.79		
	02 shifts per week	98.44	10.95		
	03 shifts per week	96.45	11.87		
	04 shifts per week	103.60	10.60		
11	Ratio of nurse and patients			0.56	
	≤ 8	97.80	10.60		
	> 8	103.45	7.63		
12	Continuous training			0.90	
	< 5 times	98.06	7.94		
	≥ 5 times	98.27	13.56		

*p<.05

Table 3 Correlations among professional autonomy, nurse-physician collaboration, and nursing practice environment (N = 180)

No	Variables	Professional autonomy		
		Correlation coefficient (r)	P-value	Strength of correlation
1	Nurse-physician collaboration	0.37	< 0.001	Low correlation
2	Nursing practice environment	0.23	0.002	Little if any correlation
	- Professional development	0.27	< 0.001	Little if any correlation
	- Management support	0.17	0.025	Little if any correlation
	- Out of depth	0.12	0.133	Little if any correlation
	- Workload	0.20	< 0.001	Little if any correlation
	- Roasting	0.10	0.159	Little if any correlation

Discussion

In our study, we found that overall and four domains of professional autonomy were moderate. Some of the reasons for this moderate level of professional autonomy might be related to the qualifications and quality of training. Nursing training programs are not standardized in all nursing schools. The Ministry of Health as well as the HUMPH lack of specific regulations to require improving practice capacity, standards of nursing, enhance nurses' authority and responsibility during the working period on the profession and practical skills to make nurses more mastery. On the other hand, the rate of bachelor's nursing accounts for only 28.9% and the majoity of nurses have experience unless 10 years (73.3%). Nurses do not perceive enough power or inadequate support and properly feel having a barrier of their right or lower legal authority. The empowerment and nursing professional law were not specific to support nurses to actively show their ability and knowledge in the scope of practice. In additional, nurses have low self-respect feelings, did not feel the value of the job. May be some limits and barriers in the nursing jobs make them had not been proud of their profession such as inadequate power, low income, hard-working, be not highly valued by societies. This finding is consistent of the studies of Amini[11] in Iran and Mrayyan[7] in Jordan but it is differrent from the research of Bahadori and Fitzpatrick[9], Cajulis et al.[23] and Maylone.[24] Compared to theses researches showed that the autonomy of nurses in western countries was higher than in Asian nurses and nurses at Hue University of Medicine and Pharmacy Hospital had a higher score of autonomy than Iranian and Jordan nurses but lower than American nurses.

The findings demonstrated that nurses perceived moderate level of nurse-physician collaboration. HUMPH is a uiniversity hospital, most of the doctors were seniors with high academic titles, whereas the nurses were young with mainly college and diploma degree. So there was a definitely affecion related respect and empowerment in the relationship between doctors and nurses. In spite of the research showed that CSACD was moderate level but the mean score was closed to high level. Some previous studies were found at a low[14] and a moderate[12] level of nurse-physician collaboration but overall mean score of CSACD is lower.

Our results also demonstrated the moderate levels of overall nursing practice environment. All domains of nursing practice environment were moderate except management support. The managers paid great attention to employees, facilitate supporting, help and solve work quickly and treat them with respect especially the manager solved unexpected tasks very quickly. However, advancement opportunities for nurses were at a moderate level, it meant the managers have not focused completely on career development for nursing and created a driving force for career development. Nurses faced work load, more than 55.6% of nurses had from 9 to 15 patients to care per day and the ratio doctor and nurses was 1/2 lower than regulation of MOH of Vietnam.

There were significant differences between autonomy with practice setting, work on shifts, and working experience as a nurse practitioner and at the current department. Nurses who work in the labor room, neonatal intensive care and operation room had the highest score of autonomy. It is explained that nurses who worked in special care settings usually face severe patients and emergency progress so they have to make a decision quickly. It meant nurses have to be masterful, skillful competent and displayed traits of professional growth. The finding was consistent with multiple studies that acute care nurses had a high level of autonomy.[11,13,22] Nurses had working time from 6 to 10 years or over 10 years who had a higher autonomy score than 1-5 year-nurses. Nurses with a length of working time that could be repeated daily work so they had more professional experiences that are appropriate and familiar with the job leading to more proficiency, more professional in care practice skills. It had the same result as Amini conducted in Iran.[11] Moreover, participants in this study 84.5% were on duty, nurses who worked only day shift had a little higher autonomy score than combination day and night shift ones (99.68 and 98.50). It was reasonable because nurses who worked only day shift were half of the head nurses. On the other hand, there were 152 nurses working at night shift, the rest were nurse administrators, head nurses, and nurses who had pregnant over 7 months and children under one year old who had no night shift. The result was different from Amini conducted in 252 Iran populations[11] which most of them were duty 2 shifts per week and no relation was found for a number of shifts with autonomy. It can be explained that, working on shift that nurses often follow a certain number as teamwork including doctors, nurses, assistant nurses and they divided by rank jobs so they must be proficient to solve the problem independently of that they have to face (so many situations both patients and administration procedures). If only day shift, the work seems simpler, it may be received the support of other people like head nurses, nurses who are not the same shift.

In this study, professional autonomy was related to nurse-physician collaboration and nursing practice environment. High nurse-physician collaboration was demonstrated that there was respect, open communication and share responsibility between nurses and doctors which would be most effective when making decision to take care patients. While motivating nurses feel valued and authority. On the other hand, a good nursing practice meant management support, professional development

helped nurses were upgraded, become more and more mastery and professional. In addition, a good nursing practice environment meant clear policies, adequate facilities and equipment, ensuring the ratio nurse and patient will create opportunity for nurses to fulfill their roles and improve professional autonomy that were showed in some studies[4,12,13,14]

Implications

The study findings suggest nurses to improve their autonomy and nursing administrators to develop a better working environment which increase respectful equality between doctors and nurses. In addition, it is necessary to focus on professional development, develop and issue-specific regulations on responsibilities, capacity standards, capacity evaluation and continuing training programs to improve nursing qualifications.

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