

**Effects of job stress, role conflict and role ambiguity on job satisfaction among staff nurses in
Thai Nguyen provincial general hospitals, Vietnam**

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ABSTRACT

This study aimed to examine the level of job satisfaction, job stress, role conflict and role ambiguity and also the level of predictive effects of job stress, role conflict and role ambiguity on job satisfaction among staff nurses. Participants were 150 staff nurses were randomly recruited from three Thai Nguyen provincial general hospitals, Vietnam. Data were collected by self-administered questionnaires. The results showed that staff nurses had moderate level of job satisfaction, low level of job stress, and low level role stress. The findings also indicated that job stress, role conflict and role ambiguity were significant negatively associated with job satisfaction at $p < 0.05$ and $p < 0.01$ respectively. About 25% of the variance in job satisfaction could be explained by role conflict and role ambiguity ($R^2 = 0.245$, $p < 0.05$). The findings of this study are benefit for managers in maintaining effective policies and developing new policies to increase staff nurses' job satisfaction.

บทคัดย่อ

การศึกษานี้มีวัตถุประสงค์เพื่อวัดระดับความพึงพอใจในงาน ความเครียดจากงาน ความขัดแย้งในบทบาทและความคลุมเครือในบทบาท และระดับการทำนายของความเครียดจากงาน ความขัดแย้งในบทบาทและความคลุมเครือในบทบาทที่มีต่อความพึงพอใจในงานของบุคลากรพยาบาล ผู้เข้าร่วมการวิจัยคือบุคลากรพยาบาลจำนวน 150 คนจากโรงพยาบาลทั่วไป 3 แห่ง ในจังหวัดไทย-เหวียน ประเทศเวียดนาม ที่ได้รับคัดเลือกจากการสุ่มแบบอิสระ เก็บรวบรวมข้อมูลโดยการตอบแบบสอบถามด้วยตนเอง ผลการศึกษาพบว่า บุคลากรพยาบาลมีความพึงพอใจในงานระดับปานกลาง ความเครียดจากงาน ความขัดแย้งในบทบาทและความคลุมเครือในบทบาทในระดับต่ำ ความเครียดจากงาน ความขัดแย้งในบทบาทและความคลุมเครือในบทบาทมีความสัมพันธ์เชิงลบกับความพึงพอใจในงานอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 และ 0.01 ตามลำดับ ความขัดแย้งในบทบาทและความคลุมเครือในบทบาทสามารถทำนายความแปรปรวนของความพึงพอใจในงานได้ร้อยละ 25 อย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 ผลการศึกษานี้เป็นประโยชน์ต่อผู้บริหารทางการพยาบาลในการสร้างไว้ซึ่งนโยบายที่มีประสิทธิภาพและพัฒนานโยบายใหม่เพื่อเพิ่มความพึงพอใจในงานของ บุคลากรพยาบาล

Key Words : Job Satisfaction, Job Stress, Role Conflict And Role Ambiguity

คำสำคัญ : ความพึงพอใจในงาน ความเครียดจากงาน ความขัดแย้งในบทบาทและความคลุมเครือในบทบาท

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Introduction

Job satisfaction is an important indicator of the well-being of an organization as well as individuals for all medical achievements (WHO, 2006). At present, it has been reported that the health care organizations around the global are facing nursing shortages. Netherlands had 7000 vacant positions for nursing in 2002, England had 22,000 vacant positions for nursing and Canada needed 10,000 more graduate nurses by 2010 (ICN, 2000). Approximately 19,000 RN and 24,200 LPN positions were estimated to be vacant in 2007 (American Health Care Association (AHCA), 2008). Furthermore, high vacancy rates effect on the hospital cost resulted from recruiting and rewarding the leaving ones, hiring temporary agency nurses, and supervising new nurses. The estimated cost of replacing a specialty nurse in the United States is \$64,000 (Strachota, et al., 2003). Moreover, nursing shortage reduces the effectiveness of patient care (Hassmiller & Cozine, 2006).

In Vietnam, a developing country, the health care sector also faces with nursing shortage. According to the Ministry of Health (MoH), Vietnam's health care sector lacks 40,000-60,000 staff nurses (Nursing training, 2009).

The major problem in Vietnam is that Vietnamese nurses are dissatisfied with their current job. It has been reported that 50.9% are unhappy in their job, and 8.2% of staff nurses intend to leave their current working in the next five years (Tran et al., 2005). Another study revealed that nursing professionals have to face many pressures related to work, but are unclear in policies of organization. Furthermore, the researches indicated Vietnamese nurses are dissatisfied with working conditions and working environment.

Working environment problems include departments have many patients and/or severe diseases, having a job requiring a precise observation or decision, too heavy work load, and high tension work (Truong, Cao, Nguyen, & Ngo, 2010). The nurses were faced with workload, unstable working schedules, and suffering with problems from patients and their families such as violence, threats, curses, etc. (Nguyen & Nguyen, 2006). From the findings of studies, it also has been reported 59% nurses and midwives have mental disorders which express as sleep disorder, or depression, tired and tensions, headache, bone pain, etc. (Nguyen & Nguyen, 2006).

In addition, there is a demand for quality patient care and strengthening development of nursing management systems. The President of the Ministry of Health, Vietnam decided to expand the roles of staff nurses to a limited extent in response to the development of the patient-centered nursing care (MoH, 1999, 2003). However, Mr. Pham, the Vice President of VNA proposed on Hanoi News, the perspective of the role of staff nurses has not been updated to be compatible with the actual situation (Kim, 2007). In addition, there is an unclear of job descriptions in working, so that, the nurses don't know the extent of their authority, and they are easy to meet confusion when they do their work (Tran et al., 2005). This will cause role stress, particularly role conflict and role ambiguity.

Literatures reported that most of the studies generally have indicated a strong negative relationship between job stress and job satisfaction (Zangaro, & Soeken, 2007). Newbury-Birch & Kamali (2001) indicated that job stress can lead to job dissatisfaction of personnel, and from that can lead to burnout. Another research reported that job stress has a direct

negative effect on job satisfaction (Lu, Wu, & Chang, 2007).

Another factor affecting job satisfaction is role stress. Role stress influences the efficacy of individuals (Tankha, 2006). Most of the organizational researches about job roles have interest in role conflict and role ambiguity. Role conflict and role ambiguity may be source of uncertainty for employees (O'Driscoll & Beehr, 2000), and they are associated with work attitudes such as commitment and satisfaction (Tankha, 2006). In fact, nursing staff must take multiple responsibilities; they are faced with many conflicts from nurse supervisors, managers, and from medical and administrative staff. The negative of role conflict may be most obvious when dealing with patients who are critically ill and dying (Tankha, 2006). In addition, the reason for high role stress can be lack of definition about the role in the hospital. From the studies, the common findings indicated that role conflict and role ambiguity were negatively associated with job satisfaction (Jackson and Schuler, 2000; Lu et al., 2008).

The studies about nurses' job satisfaction are limited in Vietnam, only two surveys were conducted since 2005. Till to date no other similar study has been conducted to show the influence of job stress and role stress, including role ambiguity, role conflict, on job satisfaction. Therefore, this study was designed to examine the influences of job stress and role stress, including role ambiguity and role conflict, on job satisfaction among staff nurses in provincial general hospitals in Thai Nguyen province, Vietnam. It is necessary to better understand job satisfaction and how job stress and role stress, including role conflict and role ambiguity influence job satisfaction among staff nurses in Vietnam. Thai Nguyen province is the study

site to test the intercultural validity of this model because it is the center of culture-economic-politics of Northeast place. In addition, Thai Nguyen Province has the high concentration of many patients with a lot of diseases. The health care sector of Thai Nguyen is the most powerful in the northeast region, and it represents the northeastern provinces.

The objective of this study are: 1) To describe levels of job stress, role stress and job satisfaction among staff nurses in Thai Nguyen Provincial General Hospitals, Vietnam, 2) To investigate the relationships between job stress, role conflict, role ambiguity and job satisfaction among staff nurses and 3) To examine the predictive effects of job stress, role conflict and role ambiguity on job satisfaction among staff nurses.

Materials and methods

A cross-sectional explanatory design was used. The sample of 150 staff nurses from three clinical units including medical, surgical and ICU in Thai Nguyen provincial general hospitals, Vietnam was selected by simple random sampling method. Data were collected during September to October, 2010.

The study was conducted using the self-administered questionnaire including demographic data (age, gender, education, income, working experience, number of patients), job stress, role stress, job satisfaction.

Job satisfaction was measured by a 36-item Job Satisfaction Survey (JSS) (Spector, 1985).

JSS measured nine facets of job satisfaction including pay and pay raises, promotional opportunities, fringe benefits, contingent reward, supervision, coworker, nature of work, and communication. Each item was rated on six-point Likert scale ranging from 1- Disagree very much to 6-

Agree very much. The Cronbach's alpha for total scale was reported to be 0.91 by Spector (1985) and 0.73 by Norbu (2010). In this study, the Cronbach's alpha was 0.80.

Job stress was measured by a 54-item Expand Nursing Stress Scale (ENSS) (French et al., 2000).

ENSS measured eight subscales including Death and Dying, Conflict with Physicians, Inadequate Emotional Preparation, Problems Relating to Peers, Problems Relating to Supervisors, Work Load, Uncertainty Concerning Treatment, and Patients and their Families. Each item was rated on four-point Likert scale ranging from 1-"never stressful" to 4-"extremely stressful". The Cronbach's alpha for total scale was reported to be 0.91 by French et al. (2000). In this study, the Cronbach's alpha was 0.94.

Role stress was measured by a 14-item Role Conflict and Ambiguity Scale (RCAS) (Rizzo et al., 1970).

It was measured in 2 subscales: role conflict, and role ambiguity. Each item was scored on a scale five-point Likert scale from 1 - never to 5 - very often. In this study, the Cronbach's alpha was 0.80.

Stepwise multiple regression analysis at a level of significance of 0.05 was conducted to predict job satisfaction among staff nurses in Thai Nguyen Provincial general hospitals, Vietnam.

Results

The age of staff nurses ranged from 22 to 53 with an average of 32.08 years. Most of the participants were females. There were 139 females (92.7%) but only 11 males (7.3%). About 90% of participants had achieved a certificate from nursing at secondary nursing school, only about 10% of participants had

completed the degree with varied levels. The staff nurses had working experience of less than 5 years (68.7%), 6-15 years (12.0%), and 12-25 years (24%) with an average working experience of 8.25 years. Most of the participants reported that each staff nurse had to care 5-10 patients per dayshift (64.7%) with an average of 12.02 patients and 10-20 patients per night shift (80.7%) with an average of 17.54 patients.

The results revealed that staff nurses had moderate levels of job satisfaction ($\bar{X} = 3.80$, $SD = 0.50$). Staff nurses reported high satisfaction with communication ($\bar{X} = 4.51$, $SD = 0.80$), nature of work ($\bar{X} = 4.44$, $SD = 0.93$), coworkers ($\bar{X} = 4.25$, $SD = 0.83$) and supervision ($\bar{X} = 4.09$, $SD = 0.83$). Staff nurses reported less satisfaction with fringe benefits ($\bar{X} = 3.28$, $SD = 0.83$) and pay ($\bar{X} = 3.29$, $SD = 0.74$). Job satisfaction scores on each item were mostly at a moderate level. However, there were two items at low level, including "I feel I am being paid a fair amount for the work I do, and there is really too little chance for promotion on my job". Six items were closely with low level, including "the benefits we receive are as good as most other organizations offer, there are benefits we do not have which we should have, Raises are too few and far between, I feel satisfied with my chances for salary increases, I have too much to do at work, and I have too much paperwork"

The results showed that staff nurses had low levels of job stress ($\bar{X} = 1.94$, $SD = 0.37$) and role stress, including role conflict and role ambiguity ($\bar{X} = 2.21$, $SD = 0.46$; $\bar{X} = 2.13$, $SD = 0.57$; $\bar{X} = 2.31$, $SD = 0.82$). Job stress and role stress, including role conflict and role ambiguity on each item were mostly at a low level. However, there were four items of job stress that were close to high level, including "Feeling

helpless in the case of a patient who fails to improve, The death of a patient with whom you developed a close relationship, Having to deal with violent patients, and Having to deal with abusive patients”. Nine items were at a moderate level, including “Listening or talking to a patient about his/her approaching death, The death of a patient, Having to deal with abuse from patients’ families, A physician not being present in a medical emergency, Being exposed to health and safety hazards, Being in charge with inadequate experience, Criticism by a physician, Too many non-nursing tasks required, such as clerical work, and Having to make decisions under pressure”; there was only one item of role conflict was at moderate level, including “I have to buck a rule or policy in order to carry out an assignment”.

predictor selected to the equation was role ambiguity, which had the highest relationship with job satisfaction. Role ambiguity accounted for 12.5% of variation in the job satisfaction. The addition of role conflict in the second step significantly increased the explanation of variation in job satisfaction (24.5%). In the final model, role ambiguity and role stress could significantly predict 24.5% of variance in job satisfaction ($R^2 = .245$, $F(2,147) = 23.930^{**}$, $p < .01$) (Table 1). Role ambiguity had strongest impact on job satisfaction ($b = -1.421$, $p < .01$), which explained 13% of the variance in this, followed by role conflict ($b = -.902$, $p < .01$). That is, staff nurses who had high low ambiguity; those had low role conflict were more likely to engage in job satisfaction (Table 1).

Table 1 Multiple correlation coefficients between independent variables and alcohol drinking behavior by stepwise multiple regression analysis (n=150).

| Steps | Variables | B | β | SE |
|-------|----------------|--------|---------|------|
| 1 | Role ambiguity | -1.421 | -.363 | .281 |
| 2 | Role conflict | -.902 | -.347 | .186 |

** $p < .01$; Note. Dependent Variable: Job satisfaction.

$R^2 = .125$ for step 1; $R^2 = .245$ for step 2; Constant = 4.764, $F(2,147) = 23.844^{**}$, Sig of F = 0.00 $p < .01$

The relationship between job stress and job satisfaction was found to be significant, low and negative ($r = -.203$, $p < .05$). The results also reported that there were significant, moderate and negative correlations between role conflict, role ambiguity and job satisfaction ($r = -.338$, $p < .01$; $r = -.354$, $p < .01$ respectively). Among three variables correlated with job satisfaction, including job stress, role conflict and role ambiguity, there were two predictor variables which could predict job satisfaction. In the first step of analysis by stepwise multiple regression, the first

That is, staff nurses who had high low ambiguity; those had low role conflict were more likely to engage in job satisfaction (Table 1).

Discussion

The job satisfaction of nurses in general was at a moderate level with mean score of 3.80 and a standard deviation of .50. This finding is similar with the results of some studies in other countries including Turkey, Greece, Bhutan (Golbasi, Kelleci & Dogan, 2008; Christina & Konstantinos, 2009; Norbu,

2010, Saifuddin, Hoangkraileert & Sermisri, 2008; Pemo, 2004). This result is also consistent with some studies in Vietnam that staff nurses were satisfied with their job (Le & Le, 2009).

Most of subscales were at a moderate level. According to Pemo (2004), level of job satisfaction on fringe benefit, pay, promotion, contingent reward, operating procedures were at a moderate level could be explained that nurses had good working atmosphere and they like their job. Among nine subscales, the lowest mean score was found on fringe benefit and pay facet ($\bar{X}=3.28$, $SD=0.83$). This may explain that the nurses worked harder, but they were not being paid a fair amount for the work they do. Moreover, the staff nurses have to work in the holidays, and may be they have work more than 8 hours per day in the nightshift. Norbu (2010) explained that the payment and benefits for nurses were low due to lack of government budget for health sector.

The result of study indicated overall nurses in Thai Nguyen hospital had low level of job stress, role stress, including role conflict and role ambiguity were reported at low level among staff nurses ($\bar{X}=1.94$, $SD=0.37$; $\bar{X}=2.20$, $SD=0.46$; $\bar{X}=2.13$, $SD=0.57$; $\bar{X}=2.28$, $SD=0.82$). Although the result is consistent with studies in Vietnam (Truong et al., 2010), it is noticeable that the average score of job stress was closely with the moderate levels.

In Vietnam, staff nurses are physicians' subordinates and they may be considered as unqualified professionals. Besides, physicians and managers are dominant over nurses and the authority and expertise of nurses for clinical decision-making is not recognized.

The result indicated that job stress had a statistically significant and negative association with job satisfaction ($r = -.200$, $p < .05$). This issue was supported by the previous studies Christina & Konstantinos (2009) and Gray-Toft & Anderson (1981). Gray-Toft & Anderson pointed out stress is positively related to job dissatisfaction in nurses' work. The relationship between job stress and job satisfaction in researches with nurses has shown they are consistently and negatively associated (Fox, Dwyer, & Ganster, 1993; Leveck & Jones, 1996).

Furthermore, this result also support the work of Christina & Konstantinos (2009) in their study of mental health nurses from Greek hospital ($r = -.453$, $p < .01$).

The results that role conflict and role ambiguity, had a direct negative effect on job satisfaction is consistent with the findings of a number of previous studies that show that a significantly negative correlation exists between stress and job satisfaction (Seo et al., 2004).

One researcher reported that the development of new technologies and organizational restructuring may cause varying levels of stress to employee (Robbins, 2003). In this study, low levels of job stress and role stress may be because Thai Nguyen province is smaller than others such as Hanoi, Ho Chi Minh. So that, Thai Nguyen province received the lower investment. Therefore, nurses facing stress factors is less, and the nurses feel more happy in their job.

From the finding of the structural equation of this model, role ambiguity and role conflict were significant predictors of job satisfaction ($R^2 = .245$, $p < .01$). Other studies reported they can account for variance of job satisfaction (Seo, Ko & Price, 2004; Lu et al., 2007). It has been reported the variance of job

satisfaction accounted for over 30% of role conflict and role ambiguity in the study of Mainland hospital nurses (Lu et al., 2007). Another study, Seo (2004) indicated that the variance of job satisfaction accounted for 53% of role conflict and role ambiguity in the study of South Korean hospital nurses. Nurses' roles within their work setting and its effect on job satisfaction are also of primary concern with role conflict and ambiguity being the main sources of job stress (Hingley & Cooper, 1986). Role conflict and role ambiguity are significantly related to job satisfaction and intent to quit the nursing professional (Lu et al., 2007).

In summary, many researches have reported that job satisfaction of hospital nurses is closely related to job stress, role conflict and role ambiguity. The results of study pointed out that overall nurses were satisfied with their job, and a moderate levels of job satisfaction was found in Thai Nguyen hospital nurses ($\bar{X} = 3.80$, $SD = 0.50$).

Conclusions

The findings of this study show that role conflict, role ambiguity and job stress play an antecedent role to job satisfaction of nurses. This study suggests that role stress, specifically role ambiguity, role conflict, and job stress are the important factors related to job satisfaction, and health care institutions should be concerned with this issue.

This study was conducted on secondtier hospitals, and in one province. This can be a limitation of this research. For this reason, it is recommended the study be repeated with large sample groups, and also to be conducted using in-depth research on the same group. For the study limitations, the future researches should

develop the appropriate measurement tools about job satisfaction, job stress, role conflict, and role ambiguity to Vietnamese culture.

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