

Research Article

Quality of Work Life among Nurse Practitioners Working at Primary Care Setting in Thailand

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Abstract

Nurse Practitioners (NPs) as the largest group of health care providers working at primary care setting should enjoy a satisfactory quality of working life and be able to provide quality care to their patients. However, reliable information on the quality of work life (QWL) of nurse practitioners working at primary care setting is limited. This study aimed to assess the QWL of nurse practitioners working at primary care setting in Thailand. Through purposive sampling, this cross-sectional study was distributed to 152 nurse practitioners from a province in Southern Thailand. The overall response rate was 67.1% (n = 102). The data-gathering instrument consisted of two parts. The first part consisted of questions on demographic information and the second part was the Brooks' survey of Quality of Nursing Work Life questionnaire. Data were analyzed using descriptive statistics, t-test, and one way ANOVA.

The results of the study showed that NPs' quality of work life was at the moderate level. It was found that NPs with master education level reported a better QWL than those with bachelor education level ($p = 0.01$). One way ANOVA test was used and found significant differences between monthly salary and QWL score ($p = 0.00$). Post-hoc tests showed that there were significant differences between the QWL of NPs with monthly salary more than 35,000 THB and those with a monthly salary lower than 25,000 THB ($p = 0.00$) or a monthly salary between 25,000-35,000 THB ($p = 0.01$). Also, t-test was used and found significant differences between the QWL scores of NPs with different location of workplace ($p = 0.02$). As quality of work life has an important impact on attracting and retaining employees, it is necessary to pay more attention to the nurses' quality of work life and its related factors. The results of this study can be used as baseline information for the health policy maker to develop strategies to improve quality of work life of nurse practitioner in order to maintain an adequate workforce at primary care setting.

Keywords: nurse practitioner; primary care setting; quality of work life

Background

Quality of work life (QWL) is vital for maintaining an adequate workforce. QWL essential in improving personnel's satisfaction and attracting and preserving personnel, and also increasing profits and provocation. From a nursing perspective, the QWL was defined as "the degree to which nurses are able to satisfy important personal needs through their experiences in their work organization while achieving the organization's goals".¹ QWL plays a significant role in nurses' turnover^{2,3} and related to the retention and job satisfaction.⁴ There are many factors that have an impact on the nurses' QWL such as the lack of work-life balance, organization climate, the nursing work condition in terms of heavy workload, poor staffing, lack of autonomy, and performing non-nursing task.^{1,5-7} Additionally, salary and the image of nursing were of concern in the literature regarding the QWL of nurses.^{7,8} Most of the literatures on the nurses' QWL studies among nurses work at hospitals.

In Thailand, Public Health Nurses (PHNs), are registered nurse who worked in the community or rural areas, have practiced several roles such as establish partnership with the community and all sectors to improve health and conditions of living of the people in the community, perform advanced health assessments of individuals, families and communities, initiate and co-ordinate health promotion and risk reduction with individuals, families and communities, and make referrals of patients to other health care providers when appropriate. Since the initiation of health care reform and a Universal Healthcare Coverage (UHC) system implemented in 2002, health centers and sub-district health promoting hospitals which located in community serve as the primary care service facilities, and their services were shifted to a more integrated proactive approach of health promotion and prevention while working closely with the community. Recognizing the

importance of the public health nurses for effective delivery of primary health care and provision of UHC, the Thai government created a policy to work towards the provision of Nurse Practitioners (NPs), a registered nurse who generally engages in primary medical care, in all health promoting hospitals. To support this policy, a four-month short course training program for registered nurses to become general nurse practitioners (GNPs), and advanced community nurse practitioners (ACNPs), prepared at a masters level, were developed to work at the primary care setting. In term of human resource criteria, the proportion of NPs and population in primary care unit has to be at least 1:5,000. However, the need for NPs working in primary care setting is evident, particularly in Southern Thailand where the NPs to population ratio is 1:5,625.⁹

NPs providing care in primary health care setting practiced on the spectrum of primary health care roles includes health promotion, disease prevention, treatment and rehabilitation. The imperative roles in nursing practice include direct care provider, advocator, educator, case manager, change agent, and consultant.^{10,11} Much of the primary care NPs practice involves the diagnosis and management of acute, self-limiting, minor illness and stable chronic health problems. In addition, the NPs need to establish and sustain partnership with the patients, family and the community; they also need to plan and implement various programs to improve the health and living conditions of people as a whole.¹²

In spite of their important role in providing preventive and curative health care, a literature concerning QWL of NPs working in primary care setting in Thailand is limited. Since QWL would not only improve job performance and job turnover, but also increase their job satisfaction and satisfaction of other aspects of life.^{5,13}

Therefore, the purposes of this study were to investigate the QWL of nurse practitioners

working in primary care setting. The results of this study may be an effective step towards improving the quality of NPs working life.

Objectives

The objective of this study was to assess the QWL of nurse practitioners working at primary care setting in Thailand.

Methods

Design: This study was a cross-sectional survey design.

Ethical Considerations: The ethical aspect of this study was approved by the Faculty of Nursing, Prince of Songkhla University ethics committee, the survey was sent to NPs working at health promoting hospital. A coded return envelope and a cover letter explained the detail and objective of the research, and illustrated the steps taken to maintain confidentiality, were sent. The return of the completed questionnaire was accepted as an indication of the participants' consent to participate in this study.

Subjects and setting: The subjects of this study consisted of the nurse practitioners working at health promoting hospital in one of the Southern provinces of Thailand. The criteria for selecting the subject for this study were as follows: 1) holder of a certificate indicating completion of the four-month short course training program for NPs or a master's degree prepared in community health nursing 2) working full time as an GNPs or a ACNPs at the health promoting hospital, and 3) willing to participate in the study. The setting was the health promotion hospital located in one of the Southern provinces of Thailand. The province was purposively selected based on geographic considerations which were diversity and convenience.

The total number of NPs in the province was 252. The sample size representative of the

NPs in this study is 152. It is determined based on the Krejcie and Morgan's sample size calculation which is the same as using the Krejcie and Morgan's sample size determination table.¹⁴ The Krejcie and Morgan's sample size calculation was based on $p = 0.05$ where the probability of committing type I error is less than 5 % or $p < 0.05$. A convenience sampling method was used in this study. The data were collected between August - November 2016 using self-administered questionnaire. They were distributed to all 175 targeted health promoting hospital ($n = 152/102$, response rate 67.10%). All NPs working in the health promoting hospital were eligible to participate in this study.

Instruments: Data collected using Brooks' survey of Quality of Nursing Work Life (QNWL),¹⁵ and demographic data questions. The QNWL survey consists of 42 items related to four dimensions: (a) work life/home life, (b) work design, (c) work context and (d) work world. The work life - home life dimension is defined as the interface between the nurses' work and home life. The work design dimension is the composition of nursing work and describes the actual work that nurse perform. The work context dimension includes the practice settings in which nurses work and explores the impact of the work environment on both nurse and patient systems. Finally, the work world dimension is defined as the effects of broad societal influences and changes on the practice of nursing. The questionnaire asks respondent nurses how much they agree or disagree with each item on a 6-point scale ranging from 1 'strongly disagree' to 6 'strongly agree'. The score of QNWL survey ranges from 42-252. The QNWL is divided into low (42-112), moderate (113-182) and high (183-246).

This is the same for each subscale. In addition to the original English format, the questionnaire used was translated into Thai using a translating and back translated technique and a committee

approach. A panel of three bilingual experts in public health research and in health management reviewed the questionnaire and assured its validity. The pilot study conducted to ensure the clarity and appropriateness of the questionnaire. The socio-demographic characteristics and work related data measured in the study include gender, age, marital status, dependent children, dependent adults, tenure, salary per month, and location of work place. Construct validity of this instrument were calculated for the 42-item survey using Cronbach's α is .89.¹⁵ In this study, the Cronbach's alpha for Brooks' scale is (.89), and the test-retest reliability was reported using Pearson's $r=0.91$ ($n=30$).

Data analysis: Descriptive statistics were used to analyzed demographics and quality of work life. Total scores and sub-scores for QNWL items and item summary statistics were computed and reported. Independent sample t -test was conduct to examine the mean difference between quality of work life scores and education level, gender,

dependent child, dependent parent, and location of workplace. Also one-way ANOVA was used to determine the mean difference between quality of work life and the others demographic variables. P values less than 0.05 were considered significant for all tests.

Results

An independent sample t -test and one way ANOVA were conducted to determine any significant difference in the QWL scores by demographic variables. As noted in Table 1, respondents ranged in age from 26 to 56 (mean age of 40.77), and predominately were females, married, with dependent children and dependent parents. Most of the respondents held the bachelor degree in nursing, and received a monthly salary of 25,000 to 35,000 Thai Baht (THB). About 63.7% of respondents were working in rural areas. The mean work experience as a registered nurse was 17.2 years, with about 5.2 years in the current workplace.

Table 1 Number and Percentage of the Respondents by General Characteristics (N=102)

General Characteristics	n	(%)
Gender		
Male	6	5.9
Female	96	94.1
Age (Mean = 40.77; SD = 7.85)		
Marital status		
Single	14	13.7
Married	80	78.4
Divorced/ Separated	8	7.8
Education level		
Bachelor degree	94	92.2
Master degree	8	7.8
Monthly Salary (Thai Baht)(Mean = 30,369.21; SD = 8,563.65)		
Dependent Parents		
Yes	89	87.25
No	13	12.74
Dependent child		
Yes	84	82.35
No	18	17.64

Table 1 (Continued)

General characteristics	n	(%)
Working experience (year) (Mean = 17.17; SD = 8.63)		
Organization tenure (year) (Mean = 5.21; SD = 3.72)		
Location of workplace		
Rural area	65	63.7
Urban area	37	36.27

As shown in Table 2, One way ANOVA test was used and found significant differences between QWL score of NPs with different monthly salary ($p = 0.00$). Post hoc test showed that there were significant differences between the QWL of nurses with monthly salary more than 35,000 THB and those

with a monthly salary lower than 25,000 THB ($p = 0.00$) or a monthly salary between 25,000–35,000 THB ($p = 0.01$). Also, t-test was used and found significant differences between the QWL scores of NPs with different education level ($p = 0.01$), and different location of workplace ($p = 0.02$).

Table 2 Quality of Work Life by Demographic Variables Using t/F- test

Variable	Mean	SD	F-test	t-test
Gender				
Male	168.16	8.85		-0.08
Female	168.81	8.69		
Age				
20–30 years	161.89	17.70	2.12	
31–40 years	168.21	21.47		
41–50 years	169.60	16.81		
51–60 years	179.20	13.11		
Marital status				
Single	172.85	14.48	0.47	
Married	168.08	18.24		
Divorced/ separated/ widowed	168.75	23.69		
Education level				
Bachelor degree	167.51	18.13		-2.51*
Master degree	183.87	9.59		
Monthly Salary (Thai Baht)				
< 25,000	160.62	20.00	7.90**	
25,000– 35,000	166.61	18.62		
> 35,000	177.27	12.01		
Dependent parents				
Yes	168.92	17.54		-.185
No	167.92	22.59		
Dependent child				
Yes	164.11	17.06		-1.21
No	169.79	18.29		

Table 2 (Continued)

Variable	Mean	SD	F-test	t-test
Working experience				
≤10 years	166.23	16.30	1.71	
11-20 years	166.06	21.66		
> 20 years	172.90	15.89		
Organization tenure				
≤5 years	168.76	18.85	0.48	
6-10 years	167.10	16.21		
> 10 years	173.70	19.44		
Location of workplace				
Rural area	166.21	18.86		-2.01**
Urban area	173.32	16.02		

*<0.05, **<0.01

The 42 items of QNWL total possible score range from 42 to 252. A low total scale score indicates a low QWL, a high total score indicates a

high QWL. The actual range score of the study was 109 to 210 (mean = 168.79), which is higher than the average score on the Brooks's scale. (see Table 3)

Table 3 Total Scores and Subscores for Quality of Work Life Items

Scale	Average	Actual range	Mean	SD	Level
Total scale (range 42-252)	147	109-210	168.79	18.13	Moderate
Work life-home life subscale (range 7-42)	24.5	15-36	25.76	3.48	-
Work design subscale (range 10-60)	35	21-58	39.18	6.15	-
Work context subscale (range 20-120)	70	53-105	84.08	10.70	-
Work world subscale (range 5-30)	17.5	10-28	19.75	2.79	-

Discussion

The present study aimed to assess the QWL of NPs working at primary care setting in Thailand. The results of the study showed that the majority of the NPs had a moderate level of QWL. Contrary to the previous study of quality of work life among primary health care nurses in Jazen, Saudi Arabia,¹⁶ where the respondent were not satisfied with their QWL. However, these results were consistent with the study that explored the conceptions and experiences of quality of life and QWL among primary health care nurses in São Paulo state, Brazil, where there was recognition of satisfaction in working in primary health care setting.

Our finding that the NPs with master education level reported a better QWL than those with bachelor education level is in line with earlier research showing that type of nursing education was related to nurses' confidence in applying nursing skills which contribute to job satisfaction.¹⁷ A number of previous nursing studies support the notion that highly educated individuals develop higher satisfaction with their work.¹⁸⁻²⁰

Further, monthly salary and QWL score showed that there were significant differences between the QWL of NPs with monthly salary more than 35,000 THB and those with a monthly salary lower than 25,000 THB or a monthly salary

between 25,000–35,000 THB. Regarding the characteristics of the NPs in this study that almost of them had to take care of their dependent family members, and that situation was more likely to have financial constraints. These results were consistent with findings of previous studies where life satisfaction score was a positive correlation with nurse's income²¹ and also found to be a major factor in the dissatisfaction of nurses with their QWL.¹⁶ In this study, the QWL was higher in nurses who have working experience more than 20 years than those who have less working experience although the difference was not statistically significant. This could perhaps be because length of work experience is considered as one of the sources of occupational stress for nurses.²² Therefore, it seems that nurse with greater work experience feel less occupational stress and more stability in their job and thus

experience a better QWL.²³

Finally, as expected location of workplace and QWL scores of NPs were significantly different. The earlier study based on registered nurse indicates that work environment is one of the factors that influenced job satisfaction.²⁴ As quality of work life has an important impact on attracting and retaining employees, it is necessary to pay more attention to the nurses' quality of work life and its related factors.

These results are useful to support strategies to improve quality of work life of Thai nurse practitioner. However, it is important to be aware when applying the findings. Since only one province in Southern Thailand was part of the study. Thus, generalizability of the findings is very limited. Future studies need to include a larger number of NPs throughout every region of Thailand.

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