Research Article

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Quality of Working Life among Public Health Personnel in Sub-District Health Promoting Hospitals, Nakhon Pathom Province

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Received: May 2 2025; Revised: July 8 2025; Accepted: July 9 2025

Abstract

Quality of working life is a key factor that affects work efficiency and the retention of personnel in the healthcare system. This descriptive cross-sectional study aimed to assess the quality of work life (QWL) and investigate the relationships between personal characteristics, organizational climate, organizational support, and overall QWL among personnel working in sub-district health promoting hospitals (SHPH) in Nakhon Pathom province. A total of 297 persons (96.12% response rate), who have worked in SHPH for at least six months were included in this study. Data were collected from July 17 to August 31, 2023, using a self-administered questionnaire. Descriptive statistics, chi-square tests, Spearman's rank correlation, and multiple linear regression were employed for data analysis, with a significance level set at 0.05. The results showed that the QWL was at a high level (Mean = 3.82, S.D. = 0.41). Social support ($r = 0.746$, $p < 0.001$) and organizational climate ($r = 0.724$, $p < 0.001$) were significantly associated with QWL. However, no significant association was found between personal characteristics and QWL. Social support and organizational climate were significant predictors of the QWL, jointly accounting for 66.9% of the variance in QWL (R^2 adj = 0.669).

The SHPH directors and public health administrators should focus on improving the organizational climate and social support through clear and practical policies to enhance the quality of working life among personnel.

Keywords: Quality of working life, Social support, Organizational climate, Sub-district health promoting hospital, Personnel

What was Known

- Quality of work-life (QWL) issues impact the healthcare system, which is a key concern for the Ministry of Public Health (MOPH).
- The QWL among health professionals was at a moderate to high level. The organizational climate and social support have been linked to better QWL.

What's New and Next

- The COVID-19 pandemic may have impacted the quality of work life among SHPH staff, a topic that has limited information in previous studies.
- The COVID-19 pandemic may have impacted the quality of work life among SHPH staff. This study offers new insights into the QWL of SHPH personnel, a population that has been underrepresented in previous studies, especially in the post-COVID-19 context. It also fills an important gap in understanding the determinants of QWL in rural primary healthcare facilities in Thailand.
- The findings from this study may guide policy recommendations and practical interventions aimed at improving the quality of work life among SHPH staff in Nakhon Pathom province.

Introduction

Good quality of work life (QWL) is a key goal in the workplace. The concept of QWL is essential for organizational efficiency and sustainability, especially in the healthcare sector[1]. In Thailand, the Ministry of Public Health has continuously prioritized the well-being of healthcare workers, recognizing that well-supported personnel contribute to better public health outcomes[2]. The National Health Strategy Plan 2017–2036 aims to achieve the goal of "Healthier people, happier health care workers, and a sustainable health system." This strategy focuses on four key areas: promotion, prevention, and protection (PP&P), service excellence, people excellence, and governance excellence. In terms of people excellence, the initiative aims to promote workplace happiness, enhance employee productivity, and achieve shared organizational goals[3].

Between 2019 and 2022, the COVID-19 pandemic, which disrupted healthcare systems globally, had a significant impact on the well-being of healthcare workers worldwide, including those in Thailand. SHPHs play a vital role in delivering healthcare services, especially in rural areas, providing care from birth to old age. During the COVID-19 pandemic to its transition into an endemic phase, staff working at SHPH encountered significant challenges in simultaneously managing COVID-19 prevention efforts and doing the continuity of routine healthcare services. Their efforts included disease investigations, patient tracking, and community contact tracing. Healthcare workers in these facilities experienced unique stressors due to limited resources, heavy workloads, and challenges in providing essential care. Understanding the QWL of these workers, particularly in the post-pandemic period, is essential for developing effective strategies to improve the QWL, increase job satisfaction, and enhance overall performance.

QWL refers to the satisfaction employees derive from their work environment, encompassing various factors such as workplace culture and the fulfillment of employees' needs and aspirations. Walton's QWL theory identifies eight key components that influence job satisfaction: adequate and fair compensation (AFC), safely working environments (SWE), opportunity to use and develop capacities (OUDC), opportunity for growth and security (OGS), social integration in the organization (SIO), constitutionalism in the organization (CO), work and total like space (WTLS), and social relevance of work life (SRWL)[4]. These factors have been shown to significantly affecting job satisfaction, organizational commitment, turnover intention, and overall work performance [5, 6].

Previous studies have explored the QWL among healthcare professionals, yielding varying results across different groups and locations. For example, Piatanom[7] found that medical technologists reported high QWL. While Thongruen P.[8] reported moderate level of QWL among staff in SHPHs in Samut Prakan Province, inconsistent with Changsri, Bouphan[9] study found that QWL of public health technical officers in Sakon Nakhon Province were at a high level. Petchtaeng et al.[10] observed similarly high QWL levels among public health nurses in primary health care units in the central region of Thailand, consistent with professional nurses in public health centers, primary care unit in Bangkok[11], and dental personnel in public health centers in Khon Kaen Province by Sangsuwan[12] also found high QWL. During the COVID-19 pandemic, Hafiz Hamid Rashid[13] study revealed that 84.2% of medical personnel reported moderate QWL, reflecting the challenges of the crisis. Literature reviewed showed factors significantly associated with QWL many factors such as personal characteristics, SS[11] and OC[7] and supportive organizational environment[14]. Raguel González-Baltazar[15] found gender differences in QWL, with female healthcare workers reporting higher job satisfaction than their male counterparts.

Nakhon Pathom Province played a significant role in responding to the COVID-19 pandemic. However, there is limited empirical research on the QWL of healthcare personnel in SHPHs, particularly regarding social support (SS) and organizational climate (OC). Understanding the impact of OC and SS on QWL among SHPHs personnel in Nakhon Pathom is essential, especially in the context of national policies focusing on healthcare system development and post-pandemic recovery. The healthcare system continues to face lingering effects from the COVID-19 crisis, making it crucial to address these challenges for the well-being of health personnel. Furthermore, the findings are expected to benefit healthcare administrators and policymakers in Thailand by offering valuable insights into strategies for improving the work environment in SHPHs. In particular, strengthening SS and OC may play a critical role in enhancing QWL among healthcare personnel.

Materials and Methods

This is cross-sectional study design. The health personnel was define as a staff who is responsible in SHPH in Nakhon Pathom Province. A self-administered questionnaire was used to obtained the data from July 17 and August 31, 2023.

Population

The study population consisted of 865 health personnel working in 134 SHPH across Nakhon Pathom province16. These included 35 small, 84 medium, and 16 large SHPHs, with corresponding staff distributions of 170, 546, and 179 personnel, respectively.

Samples

The sample size was calculated using Daniel's formula[17] for sample size estimation, with the variance $(0.52)^2$ derived from the Sripum, et al' study[18], z=1.96 for 95% confidence level, and d =0.05 (margin of error). This resulted in a required sample size of 281 participants. To accommodate potential non-responses or incomplete data, 10% was added, resulting in a final sample size of 309 participants. The Inclusion criteria consisted of full-time health personnel, registered nurses, public health technical officers, public health officers, dental hygienists, dental assistants, nurse assistants, and applied Thai traditional medicine, who were 18 years or older and have been working full-time at current SHPHs in Nakhon Pathom Province at least six months. Participation was voluntary, and all participants provided informed consent. Exclusion criteria included individuals who were outside the study area, on leave, in self-quarantine, or those who did not complete the questionnaire. A stratified random sampling approach was used, selecting 15 small, 37 medium, and 8 large SHPHs, from which 60, 185, and 64 staff, respectively were chosen. A total of 297 out of 309 staff members returned the completed questionnaire sent via mail.

Data collection

This study was approved by the Research Ethics Committee for Human Research, Faculty of Public Health, Mahidol University, prior to data collection.

Data collection was carried out after receiving official permission from the Chief of the Provincial Public Health Office in Nakhon Pathom Province. Subsequently, the researchers coordinated with the District Public Health Offices to contact the SHPH directors for distributing the questionnaires to the target participants. Each participant signed an informed consent form prior to completing the questionnaire. The signed consent form and the completed questionnaire were placed in separate envelopes and submitted individually to the researcher. The data was collected between July 17 and August 31, 2023.

Research Instruments

A self-administration questionnaire was used for data collection in this study. It consisted of four parts as follows:

First part: Personal characteristics 7 questions regarding sex, age, education, position, work experience, salary, and employment type.

Second part: QWL measured the perceived level of satisfaction with the QWL among staff. The questionnaire was based on Walton's concept[19] and adapted from Thongruen's study[8]. it consists of 38 items relate to eight dimensions of QWL: (a) AFC, (b) SWE, (c) OUDC, (d) OGS, (e) SIO, (f) CO, (g) WTLS, and (h) SRWL. Each item was rated on a five-point Likert scale (1 = lowest satisfaction, 5 = highest). The item-objective congruence (IOC) index was 1.0, indicating strong content validity. The overall reliability of the QWL scale, assessed by Cronbach's alpha, was 0.953.

Third part: Social support (SS), assessed SS that they receive from their supervisors and coworkers based on House's theory[20], and included 14 items across four dimensions: (a) emotional support (b) instrumental support (c) information support and (d) appraisal support. The responses are five points Likert scale (1=strongly disagree, 5 =strongly agree). The IOC ranged from 0.67 to 1.00 and the Cronbach's alpha was 0.872.

Forth part: Organizational climate (OC), the questionnaire adapted from the questionnaire of Thongruang[8] which was developed based on Steers' organizational climate concept[21]. It consists of 14 items 4 aspects: (a) organizational structure (b) leadership policy and practice (c) technology (d) environment. The responses are five points Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The IOC ranged from 0.67 to 1.00 and the Cronbach's alpha was 0.928.

The interpretation of QWL, SS, and OC levels was based on mean scores, categorized into five levels: 1.00–1.80 (very low), 1.81–2.60 (low), 2.61–3.40 (moderate), 3.41–4.20 (high), and 4.21–5.00 (very high).

Results

A total of 297 respondents participated in the study. The majority were female (83.16%), age group between 30 and 39 years (39.73%). Most respondents (88.89%) had a bachelor's degree or equivalent, approximately half of the respondents (50.84%) were in the position of public health technical officers, 44.11% had work experience in the current SHPH 1–5 years. The median income was 25,000 baht per month, the employment type, they were government officicers (62.29%), as shown in Table 1.

Table 1 Personal characteristics of the participants (n=297)

Personal Characteristics	Number	Percentage
Sex		
Female	247	83.16
Male	50	16.84
Age (yrs)		
20-29	68	22.90
30-39	118	39.73
40-49	64	21.55
50-59	47	15.82
mean 38.0, S.D. ±10.0, min-max 20-59		
Educational level		
Below Bachelor's degree	15	5.05
Bachelor's degree or equivalent	264	88.89
Master's degree and Doctoral degree	18	6.06
Current position		
Public health technical officer	151	50.84
Registered nurse	77	25.93
Public health officer	36	12.12
Administrative officers and dental hygienists	33	11.11
Work experience (yrs)		
1-5	131	44.11
6-10	63	21.22
11-15	44	14.81
16-20	15	5.05
^{3} 21	44	14.81

Table 1 Personal characteristics of the participants (n=297) (Cont.)

Personal Characteristics	Number	Percentage
Income		
≤15,000	48	16.16
15,001 – 25,000	106	35.69
25,001 -35,000	45	15.15
35,001-45,000	43	14.48
>45,000	55	18.52
Median= 25,000 (IQR=22,000)		
min-max 6,000-70,000		
Typer of employment		
Government officer	185	62.29
Ministry of public health employee	62	20.88
Temporary employee	50	16.83

The overall QWL among personnel in the SHPH was found at a high level (Mean =3.82). The participants reported high satisfaction across various aspects, except for compensation and fairness, which showed moderate satisfaction (Mean = 3.28).

In terms of SS, the findings indicated that personnel in the SHPH reported overall SS at a high level (mean = 3.98). Across all domains, the majority of respondents perceived a high level of support. The assessment of organizational climate revealed that personnel perceived overall of organizational climate at a high level (Mean = 3.97). Across all dimensions, the majority of participants reported a high level of OC (Table 2).

Table 2 Level of the quality of work life, social support and organizational climate. (n=297)

Variable	Mean ±S.D .	Level of Satisfaction
Quality of life		
1. Adequate and fair compensation	3.28± 0.68	moderate
2. Safety working environments	3.77± 0.60	high
3. Opportunity to use and develop capacities	3.86± 0.52	high
4. Opportunity for growth and security	3.65± 0.52	high
5. Social integration in the organization	4.08 ± 0.54	high
6. Constitutionalism in the organization	3.97± 0.58	high
7. Work and total Life space	3.75± 0.59	high
8. Social relevance of work life	4.15± 0.50	high
Overall Quality of Work-Life	3.82± 0.41	high
Social support		
1. Emotional support	4.03± 0.54	high
2. Instrumental support	3.93± 0.59	high
3. Informational support	4.02± 0.58	high
4. Appraisal support	3.94± 0.59	high
Overall social support	3.98± 0.51	high
Organizational Climate		
1. Organizational structure	4.00± 0.58	high
2. Leadership policy and practice	3.95± 0.57	high
3. Technology	3.89± 0.56	high
4. Environment	4.02± 0.54	high
Overall Organizational Climate	3.97± 0.50	high

Mean score: 4.21-5.00 = very high,3.41-4.20 = high, 2.61-3.40 = moderate, 1.81-2.60 = low,1.00-1.80=very low

The association between QWL, SS and OC

Chi-square tests and Spearman's rank correlation were used to examine the associations between QWL, SS, and OC. The results revealed statistically significant positive associations, between the QWL and overall SS (r = 0.742, *p*-value <0.001). Its components; emotional, instrumental, informational, and appraisal support also showed moderate, significant positive correlations with quality of work life (r = 0.682, 0.650, 0.588, and 0.658, respectively; all $p <$ 0.001). As well as overall OC was positively correlated with the QWL (r = 0.724, $p < 0.001$). Its

components; organizational structure, leadership, technology, and environment—also showed moderate, significant correlations (r = 0.687, 0.656, 0.611, and 0.583, respectively; all $p < 0.001$). In contrast, no significant associations were found between QWL and personnel characteristics of sex, age, education level, current position, work experience, income, and typer of employment.

A multiple linear regression analysis using the enter method was conducted to examine the predictive power of SS and OC on the QWL among personnel in SHPHs in Nakhon Pathom Province. The results showed that both predictors significantly explained 66.9% of the variance in QWL ($R^2 = 0.671$, $p < 0.001$). SS ($\beta = 0.338$, $p < 0.001$) and OC ($\beta = 0.370$, $p < 0.001$) were both significant positive predictors of QWL (Table 3).

Table 3 Predictors of quality of work life: Multiple Regression Analysis (n=297)

Variable	B	Std.	β	t.	*P*-value
(Constant)	1.006	0.116		8.689	<0.001**
Organizational Climate	0.370	0.044	0.451	8.497	<0.001**
Social support	0.338	0.043	0.418	7.875	<0.001**

*** p-value < 0.001*

R=0.819, R^2=0.671, Adjusted R^2 =0.669, SE=0.235, Durbin-Watson =1.903

Discussion

They are satisfied with their careers, reside in circumstances that provide stability, and maintain a balance between work and individual life, as time for their families. The organization maintains and supports rigorous operational standards, ensuring an infection-free environment and promoting involvement in the prevention and control of infectious diseases. Employees feel acknowledged inside the organization, take pride in their work, and offer suggestions for enhancing operations. The workplace is secure, providing prospects for professional growth and stability. Supervisors ensure safeguarding and accountability for job performance. Additionally, the provincial public health office organizes training programs to prepare personnel for advancement, enabling them to remain with the organization until retirement. Compensation, especially salary, is assessed at a moderate level, likely attributable to an organized salary system for civil servants that corresponds with education and work experience. The findings of this study are consistent with those of Piathanom[7], who reported that the overall QWL among medical technologists was at a high level. Similarly, the studies by Thongruang[8], Sookpradit, and

Laosupap[22] also found that QWL of personnel at SHPHs in Samutprakarn and Ubon Ratchathani was rated high.

They are satisfied with their work and profession, live in good conditions with stability, and have a balance between work and life, as well as time for their families. The organization maintains high operational standards, ensuring safety from infections, and encouraging participation in the prevention and control of infectious diseases. Employees feel acknowledged by the organization, take pride in their work, and contribute ideas for improving operations. The work environment is safe, offering opportunities for career advancement and stability. Supervisors provide protection and accountability for job performance. Additionally, the provincial public health office organizes training programs to equip employees with the knowledge and skills needed for higher positions, allowing them to remain in the organization until retirement. Although compensation, particularly salary, is rated at a moderate level, it may be due to the structured salary system of civil servants, which aligns with education and work experience. This study's results are consistent with the findings of Changsri and Bouphan[9], which found that the overall QWL of public health officers was high. Similarly, the study by Sookpradit, et al.[22], found that the organizational climate significantly affecting the QWL of public health academics at SHPHs in Ubon Ratchathani Province, where QWL was also rated high.

The factors influencing the quality of work life for personnel in SHPHs revealed that SS and OC together predicted 67.1% of the QWL (R^2 = 0.671). This suggests that if management effectively handles various aspects of the organization and creates a positive organizational climate, personnel will be able to work more efficiently and with greater satisfaction. The findings of this research are consistent with studies by Changsri and Bouphan[9], who found that the organizational climate significantly influenced the quality of work life of public health academics in SHPHs in Sakon Nakhon Province. Thinpaiboon and et al.[23], also studied the impact of OC and support on the QWL of public health officers working in SHPHs in Kalasin Province, finding that the OC influenced their quality of work life. This could be due to the positive OC, which may improve the QWL for the personnel.

However, this study found that personal characteristics, included sex, age, education, position, work experience, income, and employment type do not significantly correlate with the QWL of personnel at the SHPHs in Nakhon Pathom Province. This is consistent with previous studies that have found no relationship between sex, age, education level, work experience, and monthly income with QWL[5, 23]. The lack of correlation may be due to the differences in the

personal characteristics, and study in difference area that were difference context in the organizations.

This study has a key strengths is the use of probability random sampling, which allows the data to be representative of health personnel in SHPHs in Nakhon Pathom province. This study has several limitations. First, the cross-sectional design limits the ability to infer causality. Second, the data were collected from SHPHs in a single province, which may limit the generalizability of the findings to other regions. Third, the use of self-reported questionnaires may result in response bias.

Conclusion

The research findings revealed that the quality of work life was at a high level. Factors that were statistically significant associated with the QWL (p-value < 0.001) were SS (r = 0.746) and OC (r = 0.724). However, no significant association was found between personal characteristics and the QWL. The factors predicting the QWL included SS and OC. These two factors could explained 66.9% of the variance in QWL (R^2adj = 0.669).

Ethical Approval Statement

This research was approved by the Research Ethics Committee for Human Research, Faculty of Public Health, Mahidol University, on March 20, 2023, under project code MUPH 2023-034.

Author Contributions

All of the authors have contributed significantly in the development of this work. Sukpum M, and Sattayasomboon Y. contributed to the study design, data collection, data analysis, and writing of the main text. Silabutra J., and Yodmai K. contribute to the design, discussion, editing and revisions of the manuscript.

Acknowledgments

The authors would like to thank all participants for their valuable contributions. Special thanks to the Provincial Public Health Doctor of Nakhon Pathom for granting permission to collect data in the area. We also extend our appreciation to all individuals who contributed to this research.

Source of Funding

This research received no external funding.

Conflicts of Interest

The authors have no conflicts of interest to declare.

References

1. Sirgy MJ, Efraty D, Siegel P, Lee DJ. A new measure of the quality of work life(QWL) based on need satisfaction and spillover theories. Soc Indic Res. 2001; 5(3): 241–302.
2. Vagharseyyedin SA, Janaki Z, Mohammadi E. The nature of nursing quality of work life. West J Nurs Res. 2011; 33: 786 -804.
3. Ministry of Public Health (MOPH). Twenty-year national strategic plan for public health. Bangkok: MOPH; 2020.
4. Sabonete SA, Lopes HSC, Rosado D P, Reis J CGD. Quality of work life according to Walton's model: Case study of the higher institute of defense studies of Mozambique. Social Sciences 2021, 10(7), 244. DOI: 10.3390/socsci10070244
5. Almalki MJ, FitzGerald G, Clark M. The relationship between quality of work life and turnover intention of primary health care nurses in Saudi Arabia. BMC health services research 2012; 12: 1-11.
6. Ibrahim Alzamel LG, Abdullah KL, Chong MC, Chua YP. The quality of work life and turnover intentions among Malaysian nurses: the mediating role of organizational commitment. Journal of the Egyptian Public Health Association 2020; 95: 1-8.
7. Piathanom A, Intaraprasong B, Sillabutra J. Work-related quality of life among medical technologists in the regional hospital, Ministry of Public Health. J Health Sci. 2022;31: 144–53.
8. Thongruen P. Quality of work life of health personnel at Tumble Health Promoting Hospital in Samutprakarn Province [thesis]. Bangkok: Mahidol University; 2013.
9. Changsri N, Bouphan P. Critical success factors and organizational climate affecting the quality of working life of public health technical officers at sub-district health promoting hospitals in Sakon Nakhon Province. KKU Res J (Grad Stud). 2020; 21: 166–78.
10. Petchtaeng S, Kaewpan W, Klampakorn S, Sillabutra J. Factors related to the quality of work life of nurses working in primary health care units in the central region of Thailand. J Public Health Nurs. 2016; 28(1): 29–42.
11. Krongchuen S, Suwannapong N, Tipayamongkholgul M, Pobkeeree V. Professional values, social support, and quality of work life of professional nurses in public health centers, Bangkok. 2018.

12. Sangsuwannp B, Senahad N, Phimha S. Organizational climate and administrative factors affecting the quality of work life of dental personnel at sub-district health promoting hospitals in Khon Kaen Province. KKU Res J (Grad Stud). 2022; 23: 224–34.
13. Rashid HH, Rashid T, Hussain S. Professional quality of life among healthcare workers: a case study conducted during the COVID-19 pandemic. International Health Review (IHR). 2024; 4: 15-28.
14. Younglaoyoong R. Organizational climate and administrative factors affecting the organizational commitment of public health personnel at primary care units in community hospitals, Khon Kaen province. KKU Journal for Public Health Research. 2024; 17.
15. González-Baltazar R, Pando-Moreno M, Cortés S, Contreras-Estrada M, Hidalgo-González M. Quality of work life and burnout in workers of a health institution in Guadalajara, México. 2020; p. 491-7.
16. Human Resource Management Group, Nakhon Pathom Provincial Public Health Office; 2021.
17. Daniel WW, Cross CL. Biostatistics: A Foundation for Analysis in the Health Sciences. 11th ed. New York: Wiley; 2018.
18. Sripum N, Poum A, Assana S. Motivation associated with quality of working life among health personnel working in Prachinburi Province. TJPHS 2020; 3(1): 41-51.
19. Walton RE. Quality of working life: What is it. Academia Accelerating the World's Research. 1973: 11-21.
20. House J. Work stress and social support. 2nd ed. Philippines: Addison-Wesley Publishing Company; 1981.
21. Steers RM. Antecedents and outcomes of organizational commitment. Adm Sci Q. 1977; 22(1): 46–56.
22. Sookpradit K, Laosupap K. Organizational climate affecting quality of work life of public health technical officers in Tambon Health Promoting Hospitals, Ubon Ratchathani Province. Res Dev Health Syst J. 2023; 15(3): 155-68.
23. Thinpaiboon S, Srichaijaroonpong C, Sriruecha C. Organizational climate and organizational support affecting the quality of work life of public health officers at sub-district health promoting hospitals, Kalasin Province. Res Dev Health Syst J. 2021; 14(1). 431-40.

24. Auearee P, Chawiwan B, Nopporn H, Nawarat S. Nurses' quality of work life in private hospitals. 2012.