

# Factors Influencing Organizational Commitment among Nurse Managers of Labour and Delivery Departments at the Secondary Level Hospitals Affiliated to the Thai Ministry of Public Health

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## ABSTRACT

**Introduction:** Organizational commitment is an essential component that leads the delivery department to accomplish its goals, promote organizational efficiency and effectiveness, and improve the quality of healthcare services for mothers and children. This study aimed to identify and predict factors associated with organizational commitment among nurse managers of labor and delivery departments at the secondary-level hospitals affiliated with the Thai Ministry of Public Health (MOPH).

**Methods:** A correlational predictive design was applied to collect data in obstetricians-managed and treated health conditions associated with prenatal, intrapartum, and postpartum care in the secondary-level hospitals based on MOPH's E-service plan, F1- 77 hospitals (first-level) and M2 -88 hospitals (middle-level). Questionnaires were used to collect personal characteristics and information on organizational commitment. There were 17 items to collect data on three dimensions of organizational commitment: affective, continuance, and normative organizational commitment. Seven experts detected the questionnaire's content validity using a content validity index (CVI) of 0.94, and Cronbach's reliability coefficient of the questionnaires was 0.84. Data were collected and analyzed using descriptive statistics. Pearson product-moment correlation and stepwise multiple regression were used for the analyses.

**Results:** A total of 238 nurse managers from 119 labor and delivery departments at the secondary level hospitals based on MOPH's E-service plan, F1- 77 hospitals (first-level) and M2 -88 hospitals (middle-level) were recruited into the study. Age and education were significantly correlated at  $p\text{-value} < 0.010$  ( $r = 0.20$ ,  $r = 0.23$ ) and predicted an 8.6% variance in organizational commitment ( $R^2 = 0.086$ ,  $p\text{-value} < 0.010$ ). They also significantly predicted 13.1% and 10.1% of the variance in affective and normative organizational commitment ( $R^2 = 0.131$ ,  $p\text{-value} < 0.001$ ;  $R^2 = 0.101$ ,  $p\text{-value} < 0.010$ ). The strongest influencing of organizational commitment was education level ( $\beta = 0.21$ ,  $p\text{-value} < 0.010$ ), and it was also the best predictor of organizational commitment ( $\beta = 0.17$ ,  $p\text{-value} < 0.010$ ).

**Conclusion:** The midwifery nurse administrative of the delivery unit should be concerned with affective and normative organizational commitment. Enhancing continuing education at higher educational levels or taking a short training course could promote a better practice of maternal and midwifery care.

**Keywords:** Organizational commitment; Nurse manager; Head nurse; Labour and Delivery departments

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## Introduction

The primary goal of a healthcare unit is to achieve a positive clinical and organizational outcome. Management of healthcare and nursing organizations includes key elements of the quality of care and organizational performance such as the physical and mental environment, organizational culture, healthcare providers and staff behaviors, clients and healthcare team interpersonal relationship, communications and operation management policy, clinical protocol, and operational standards [1]. Multidisciplinary teams such as medical or nursing managers in healthcare services should consider their primary clients' clinical needs and organizational performance [2].

The national strategic plan policy of the Ministry of Public Health (MOPH) of Thailand states that healthcare organizations should apply the four excellences: (1) promotion and prevention excellence, (2) service excellence, (3) people excellence, and (4) governance excellence into their organization. Healthcare organizations should provide quality and safety services, including clients' and healthcare providers' satisfaction and organizational effectiveness achievement. In nursing organizations, the delivery units' organizational effectiveness is crucial as it enhances the quality of nursing services, higher client satisfaction, higher staff commitment and retention, profitability, and the creation of competitive advantages for hospitals and quality of life for clients [3, 4].

Regarding nursing staff in the delivery department, nurses are major personnel factors in caring for and protecting maternal and child health. A nursing shortage has been growing for some decades, an obvious concern and challenge for hospitals showing the percentage of the shortage of nurses is high turnover rates [5]. Several previous studies showed that the high rate of nurse turnover may be linked to overwhelming heavy workloads, frustrated relationships in work, and nurses' lack of opportunities for career development [6]. A study conducted in Thailand reported that there were two main factors affecting the resignation intention of Generation Z registered nurses, the first is the internal driving factors of the current hospital, such as the working environment with supervisors and colleagues and the second is the external driving factors of the new organization, such as welfare and remuneration [7]. Therefore, nurse managers should imply effective strategies to enhance nurse's commitment and retention. Organizational commitment is an antecedent factor related to retention. Organizational commitment implies promoting organizational goals and tries to foster commitment. Likewise, there is a negative relationship between organizational commitment and intent to leave the workplace, and staff with high organizational commitment are happier with their work and spend less time away from their jobs [8]. It can be concluded that an organization cannot achieve competitive levels of

quality if the staff does not reach satisfaction or does not identify with the organization [5, 8, 9].

Among the factors contributing to the high retention and turnover rate, organizational commitment is an antecedent, as well as individual personal characteristics and behaviors. Organizational commitment refers to the extent to which an individual's identification with involvement in a particular organization [9, 10]. Previous studies found several variables correlated and predicted organizational commitment among nurses, such as age, income, marital status, years of experience, and level of education. The nurses who believe their organization supports their contributions and well-being will be committed to their organization and will have a higher sense of loyalty than nurses who do not have such a belief. Educational attainment is one of the demographic factors related to organizational commitment [11].

The significant gaps in the literature regarding organizational commitment and the nursing sector, especially in the delivery department, depend on numerous significant components and factor determination; nurses' commitment to their organization is an essential component that leads the labour and delivery department in accomplishing its goals, promotes organizational efficiency and effectiveness and improves the quality of healthcare services for mothers and children [4]. Therefore, this study aimed to investigate the level of organizational commitment among the head nurse of the labour and delivery room and predict factors affecting organizational commitment such as age, education attainment, income, marital status, and experience year of the administrator of the nurse managers of the labour and delivery department in secondary level hospitals under the Ministry of Public Health. The secondary-level hospitals are based on Thailand's Ministry of Public Health (MOPH). The MOPH's E-service plan consists of the level of A: advance-level hospital, S: standard-level hospital, M1: middle-level hospital, M2: middle-level hospital (120 beds), F1: first-level hospital (90 beds), F2: first-level hospital (60 beds), and F3: first-level hospital (60 beds). The M2 level is a mid-level referral general hospital, and the F3 is the first-level referral community hospital. The obstetricians managed and treated health conditions associated with prenatal, intrapartum, and postpartum care at the secondary hospitals: the M2 and F1 levels. This study should help nursing organizations promote organizational productivity and goal attainment of maternal and child health nursing.

## Methods

### *Study population*

The population in this study was the head nurse and the sub-head of the labour and delivery department, who had work experience as an administrator in secondary-level hospitals under the Ministry of Public Health (MOPH).

### *Study sample*

The samples have worked with more than one year of work experience as administrators at the labour and delivery department of secondary-level hospitals under the MOPH. The formula of Krejcie and Morgan (1970) was applied to calculate the sample size. The samplings were 119 hospitals and 238 the head nurse and the sub-head of each secondary level hospital based on MOPH's E-service plan, F1- 77 hospitals (first-level) and M2- 88 hospitals (middle-level). The sample size of 238 nurse managers was obtained (72.1%). The obstetricians managed and treated health conditions associated with prenatal, intrapartum, and postpartum care at the secondary level hospitals.

### *Research Instruments*

The researcher developed the concept of Allen and Meyer's organizational commitment (1996) [12], composed of affective, continuance, and normative commitment. The scale design provided ratings on 5-level Likert scales ranging from "5 means most real", "4 means real", "3 means not sure", "2 means unreal," and "1 means most unreal". Item content for the scales that corresponded to the objective being studied by the researcher and the indicators were selected.

The criteria and interpretation of the mean scores of the study were classified into the following five levels based on Best and Kahn (2014) [13]. The range 4.45-5.00 means the highest, 3.45-4.44 means high, 2.45-3.44 means moderate, 1.45-2.44 means low, and 1.00-1.44 means the lowest.

The demographic data questionnaire for samplings collected data on gender, age, education attainment, income, marital status, and experience year of administrator. The organizational commitment questionnaire contained 17 questions on three dimensions: affective organizational commitment, continuance organizational commitment, and normative organizational commitment. The content validity index (CVI) for the entire questionnaire was 0.94, and Cronbach's Alpha Coefficient was 0.84.

### *Data collection*

The researcher requested approval documents for data collection from Christian University to the administrators of 119 secondary-level hospitals under the MOPH to ask for support in data collection and certification of human research ethics. After ethics approval, the researcher coordinated with the nurse manager and sub-nurse manager at each hospital's labour and delivery department to explain the research objectives, questionnaire information, and methods for completing the questionnaires along with sending questionnaires by the post office. The research spent four months collecting data in June–September 2017. The researcher sent 330 questionnaires and received 238 questionnaires back (72.1%). After collecting the data, the researcher performed data analysis by using inferential statistics.

### *Data analysis*

Data were analyzed using statistical computer software. Descriptive statistics such as frequencies, means, and percentages were used to analyze the samples' demographic data and level of organizational commitment. Standard multiple regression analysis (MRA) was conducted to examine the predictive power of the independent variables.

### *Ethical considerations*

The Ethical Committee of the Christian University of Thailand approved the research project (Registration No. N. 38/2016) on June 3, 2017, and permission was obtained from the ethics committee for research involving human subjects at the selected secondary-level hospitals where the research data were collected. Data was collected on the protected samples, including personal information and ethical concerns, which included informed consent and maintaining confidentiality. The participants had the right to cancel participation in the study at any time without any impact.

## Results

The mean age of participants was 46.0 (SD =7.6); 48.3% were in the 46-55 age group, and 98.3% were females. Regarding nursing education, 86.1% of participants had finished a bachelor's degree, and one had a Doctor of Philosophy, respectively. The income majority was 41.2%, with 40,000-50,000 baht monthly. Most of the samples (67.6%) were married. The mean year of experience in the head nurse position was 9.8 (SD=8.3); nearly half of the participants, 42.0%, had 1-5 years of experience working for this state secondary-level hospital (Table 1).

**Table 1** Demographic characteristics of the samples (n = 238)

Demographic characteristics	n	%
<b>Gender</b>		
Male	4	1.7
Female	234	98.3
<b>Age (years)</b>		
<35	17	7.1
36-45	89	37.5
46-55	115	48.3
>55	17	7.1
<i>Mean=46.0, SD=7.6, Max=58, Min=29</i>		
<b>Education</b>		
Bachelor degree	205	86.1
Master degree	32	13.5
Doctoral degree	1	0.4
<b>Income (baht)</b>		
10,000-20,000	32	13.5
20,001-30,000	79	33.2
30,001-40,000	98	41.2
40,001-50,000	26	10.9
> 50,001	3	1.2
<b>Marital status</b>		
Single	54	22.7
Married	161	67.6
Divorces	23	9.7
<b>Experience of administrator (years)</b>		
1-5	100	42.0
6-10	53	22.3
11-15	32	13.5
16-20	26	10.9
21-25	11	4.6
26-30	10	4.2
> 30	6	2.5
<i>Mean =9.8, SD=8.3, Max=35, Min=1</i>		

**Organizational commitment and its predicting factors**

The levels of affective commitment and normative commitment were high (Mean=4.00, SD=0.61; Mean=3.61, SD=0.59), while the level of continuance commitment was moderate (Mean=3.21, SD=0.69, respectively). The overall organizational commitment among participants was high (Mean=3.62, SD=0.49) (Table 2).

**Table 2** Level of organizational commitment (n = 238)

Organizational commitment	Mean	SD	Range Min-Max	Level
Affective commitment	4.00	0.61	3-5	High
Continuance commitment	3.21	0.69	1-5	Moderate
Normative commitment	3.61	0.59	2-5	High
<b>Overall</b>	<b>3.62</b>	<b>0.49</b>	<b>2-5</b>	<b>High</b>

The educational attainment variable generates a positive low correlation towards organizational commitment with a figure of 0.23. Also, the age variable has a positive low correlation towards organizational commitment with a figure of 0.20 (Table 3).

**Table 3** The correlation coefficient on the organizational commitment (n = 238)

Variables	Organizational commitment (r)
Educational attainment	0.23***
Age	0.20***

\*\*\*Correlation is significant at level 0.001

Nursing education and age were significant predictors, explaining 8.6 % of the variance in organizational commitment ( $F=7.994$ ,  $p\text{-value}<0.010$ ). The strongest predictor of organizational commitment was nursing education ( $\beta=0.21$ ,  $p\text{-value}<0.010$ ), followed by age ( $\beta=0.17$ ,  $p\text{-value}<0.010$ ) (Table 4).

**Table 4** Regression coefficient of predictors in raw scores (b) and standard scores ( $\beta$ ) of the multiple regression equation used in predicting the organizational commitment (n = 238)

Predictor	b	B	t	p-value
Constant	3.076		25.27	0.000*
Education attainment	.29	.211	3.357	0.001*
Age	.078	.178	2.827	0.005*

\*\* $p\text{-value} < 0.010$ ,  $R = 0.293$ ,  $R^2 = 0.086$ ,  $F = 7.994$

The results of the analysis of multiple regression coefficients. At least one variable was found to affect organizational commitment with a statistical significance of 0.050 ( $F=7.99$ ,  $p\text{-value}=0.010$ ), and organizational commitment can be explained to have two independent variables consisting of nursing education and age with a statistical significance of 0.050. Both independent variables were able to co-predict organizational commitment with statistical significance at 8.6% ( $R^2=0.08$ ), which can be used to write the following equation in raw scores:

$$Y = 3.076 + .078(\text{Age}) + 0.29(\text{Education attainment})$$

## Discussion

In our study, the overall level of organizational commitment was high. This indicated that the nurse administrator, the head nurse of the labor and delivery room, commitment to their hospital is strong, lending credence to their claim that their average age is 46.03, and most of them, 48.3%, the range age 46-55. There are several possible explanations. First, the head nurse of the labour and delivery room has worked in secondary-level hospitals under the MOPH. The hospital was rated level 2 (from 3 levels), providing good quality treatment and care for all pregnant mothers. The administrative nurses were proud to be working for this organization and cooperate to strengthen the labour and delivery nurse team on safe motherhood policy. Next, the strategy should be enhanced as cooperation and mutual support develop a sense of teamwork, relationship, organizational commitment, and belonging to the organization [9, 11].

The correlation coefficient on organizational commitment found that educational attainment and age variables generate a positive low correlation with organizational commitment. There are many personal characteristics and variables related to organizational commitment among nurses, such as organizational characteristics, work conditions, perceived organizational support, and job satisfaction, in nursing organization settings [5, 8].

Factors predicting organizational commitment, it was found that nursing education and age explained 8.6% of the variance in organizational commitment.

Organizational commitment was positively predicted by nursing education. Almost all nurses, 86.1%, have high levels of education, and 13.5% of the respondents have master's degrees. According to continuing education and life-long learning concepts, it is easy to make inspiration learning for growth and development and to enhance the nursing profession's standard. Several studies show that the level of education affects employees' commitment [10]. Finally, there are several similar studies in which organizational commitment nurses demonstrate the impact of organizational performance [4, 14-17].

At the organizational level, by predicting organizational commitment, this research study implies that nursing administrators should lead the educational attainment of nurse managers in the labour and delivery department. The CEO and the nursing administrators of the secondary level hospitals should apply these research results to enhance nurse and sub-nurse manager retention and promote organizational commitment, especially affecting organizational commitment, which identifies emotional solid attachment and involvement in the organization. These can achieve organizational effectiveness and the goal of quality of life for both clients and providers. The nursing organization policy must include the succession plan at all levels of nurse managers for education to continue individually.

## Conclusion

The CEO and the nursing department director should promote and pay more attention to the nurse managers and sub-nurse managers with higher

education; concerning them and discerning their needs and expectations could help them engage with the administrative team to develop a targeted plan for organizational improvement. According to nursing education, the chief executive officer and the policymakers should be concerned about the nurses' CPD (Continuing nurse professional development). The CPD is central to nurses' lifelong learning and is vital to keeping nurses' knowledge and skills up-to-date and nursing leadership competencies. The policymakers and relevant stakeholders need to put in place strategies to support midwifery nurse administrative or nurse managers of the labour and delivery departments at the secondary level hospitals for CPD in the long term.

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