

## The Community Health Center Performance of Sub-District Health Promoting Hospital Directors

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Received: 14 July 2019; Accepted: 03 August 2019

**Citation:** Prachak Bouphan, Kosol Sirichan. The Community Health Center Performance of Sub-District Health Promoting Hospital Directors. *Nur Primary Care*. 2019; 3(4): 1-5.

### ABSTRACT

*This cross-sectional descriptive research aimed to study factors affecting the community health center performance of sub-district health promoting hospital directors in Khon Kaen province Thailand. The samples were 180 health personnel that selected by simple random sampling from the 248 population who were responsible community health center performance. This study was collecting both quantitative and qualitative data. Focus group guideline was used to collect the data from 12 people's key informants who could provide intensive information on the topics. The questionnaire was examined and verified by the three experts for content validity and Items Objective Congruence (IOC) all items more than 0.5 and tested for reliability in pilot study of Cronbrach'Alpha Coefficient was at 0.95. Data was collected between March 1st and 31th 2016. The data distribution was performed by descriptive statistics including percentage, mean, standard deviation, median, and minimum, maximum. The Inferential statistics were Pearson product moment correlation and Stepwise multiple linear regressions. The level of statistical significance was set at 0.05.*

*The finding revealed that the overall of motivation, the key success factors and the community health center performance of health promoting hospital directors were at high level with averages of 3.90 (S.D. = 0.37), 3.53 (S.D. = 0.55) and 3.70 (S.D. = 0.57), respectively. The motivation variable, Motivator factors, hygiene factors and key success factors had moderate positive relationship with community health center performance of health promoting hospital directors with  $r = 0.534$  ( $p$ -value  $< 0.001$ ),  $r = 0.529$  ( $p$ -value  $< 0.001$ ),  $r = 0.392$  ( $p$ -value  $< 0.001$ ) and  $r = 0.698$  ( $p$ -value  $< 0.001$ ), respectively. The motivation factors; responsibility and three key success factors; quality development in healthcare and image, the link between sub-district health promoting hospital and the central hospital and people forum could predict community health center performance at 56 percentages. Initiative is found to be the most incentives and salary compensation following by community health center management and participation.*

### Keywords

Community health center performance, Motivation and Key success factors.

### Introduction

The implementation of health care service is not only on public health sector but it is the responsibility of all sectors, especially the social power in health care which affecting to the local health care and self-care research development [1]. Khon Kaen Province is one of the health services under the implementation on the strategic

development of health in the community which focuses on public participation in health care services. The restoration of primary health care in the community called "Community Health Center Performance" was applied to make the strategy of operational health. The community health center is the area for village health volunteer work and learning center on health care, moreover; it is a place for meetings and coordinates in community.

The quantitative and qualitative indicators based on key performance indicators of community health center performance

including 1) The operational 2) Management and participation 3) Providing services 4) Academic and 5) Results for health development [2]. Apart from the five categories provides an indication of quantitative and qualitative data in sub-district community health center performance.

The operation of community health center performance requires two factors to drive the working process. The first one was the Motivation factors in part of satisfaction factors including 1) Achievement 2) Recognition 3) work itself 4) Responsibility and 5) Advancements. The second is motivation factors in part of Hygiene factors including 1) Salary 2) Interpersonal relationship 3) Supervision Technical 4) Policy and Administration 5) Working condition 6) Status 7) Job security and 8) Personal Life [3].

The upgrading of health promotion hospitals focuses on health providing services, health promotion concept and health insurance at the primary level. The key success factors are an important role to support the sub-district health promoting hospital to succeed in health operation. There are six dimensions including 1) Administrator in all level supports and develops the policy and action plan 2) Organizational support in all level provides the sub-district health promoting hospital develop plan in short-term, sub-long term and long-term development 3) Initiative area must be enthusiastic community for good participation 4) People forum creates a good attitude in the community, good understanding and motivation in stakeholder participation 5) Quality development in healthcare and in the hospital to have a good image together with active operation in community and 6) The link between the health-promoting hospital and Central hospital [4].

Khon Kaen province has a procedure of developing a policy called “Community Health Center Performance” with the goal in the fiscal year 2015 was 50 percentages from all of the villages in Khon Kaen province (2,331 villages). The results show that the performance of the sub-district health promoting hospital director from 26 districts has 877 villages (37.94 percentage) not achieve the goal in the fiscal year 2015. In addition to the community health center performance in Khon Kaen province, district health services area 7, to have accordance in developing the community health center performance. There must be improvement and development of the efficiency in work. Development in academic competency in public health volunteer aims to gain knowledge, understanding, and capability [5]. The key success factors related to the person aim to apply the knowledge to work efficiently. Whether the service provider has the motivation to work and be able to operate by following the key success factors in the sub-district health promoting hospital, there will be high quality and efficiency in work.

According to the above mentioned, the researcher intends to study “Factors Affecting The Community Health Center Performance Of Sub-District Health Promoting Hospital Director In Khon Kaen Province” in order to evaluate the problem of the policy in the community health center performance of sub-district health promoting hospital directors in Khon Kaen province. It involves

development in the community health center performance and to use for basic data to develop the policy in the community health center performance.

### Objective

To determine factors affecting the community health center performance of sub-district health promoting hospital directors in Khon Kaen province, Thailand.

### Study design

This study was a cross-sectional descriptive research collecting both quantitative and qualitative data.

### Population and sample size

The populations were 248 sub-district health promoting hospital directors in Khon Kaen province, Thailand.

For quantitative data, the sample size was calculated from the formula which shown below [6].

$$n = \frac{\lambda(1 - R_{y/x}^2)}{R_{y/x}^2}$$

The samples were 47 personnel. Due to the small number of samples, Nunnally and Bernstein [7] have recommended that there should be at least 10 samples per one independent variable, which in this study, it had 18 independent variables, totaling to at least 180 samples. The samples randomly selected using the simple random sampling method and 12 key informants to provide qualitative data.

### Measurement

The five-rating-scale method was used to measure the levels of the motivation, key success factors and community health center performance of health-promoting hospital directors. The volunteers rated the extents to which they agreed with each statement on a 5-point Likert-type scale [8] described as 5 as strongly agree; 4 as agree; 3 as moderately agree; 2 as disagree and 1 as strongly disagree. The interpretation of mean score was shown below [9].

Mean score	Interpretation
4.50 - 5.00	Highest level
3.50 - 4.49	High level
2.50 - 3.49	Moderate level
1.50 - 2.49	Low level
1.00 - 1.49	Lowest level

### Research instruments

The researchers developed two instruments to collect the data. The first one was a self-administered questionnaire collecting quantitative data from the 180 sub-district health promoting hospital directors. The second one was a focus group collecting qualitative data from the 12 key informants.

The questionnaire had five different parts. The first part collecting information about personal attributes. The second part was collecting information about motivation. The third part was

collecting information about key success factors. The fourth part collecting information about community health center performance of sub-district health promoting hospital directors. A 1-to-5 Likert rating scale was used in the second, third and fourth parts. The final part contained two open-ended questions collecting information about problems and suggestion related to community health center performance. The focus group contained open-ended questions. After it was examined by the experts, the instruments were tried out in a pilot study. The reliability of the questionnaire was tested by Cronbach's alpha coefficient method (0.95).

This study was reviewed for ethical considerations by Khon Kaen University, Thailand Ethics Committee for Human Research based on the Declaration of Helsinki and the ICH Good Clinical Practice Guidelines. It was approved on February 24, 2016. The reference code was HE 582335.

### Data Analysis

Quantitative data were analyzed using descriptive statistics which were the percentage, mean, standard deviation, median, minimum, maximum whereas, the Pearson product moment correlation was used to analyze the relationship between core competencies, organizational climate, and functional communication. The predicted model was shaped using stepwise multiple linear regression analysis. Content analysis was used to analyze the data from the focus group. The interpretation of correlation coefficient (r) was as followed [10].

Correlations coefficient(r)	Interpretation
0	No relationship
± 0.01 to ± 0.30	Weak relationship
± 0.31 to ± 0.70	Moderate relationship
± 0.71 to ± 0.99	Strong relationship
± 1	Perfect relationship

### Results

Personal attributes of sub-district health promoting hospital directors in Khon Kaen, Thailand. The samples were male and female in equal proportion. About 50.0 percent were aged between 41 to 50 years old where the average age was 47.48 years old (S.D. = 6.33). The youngest one was 30 years old while the oldest was 60 years old. Most of the samples were married (86.1%). About 94.4 percent hold a bachelor's degree. Most of the samples working experience with the average were 2 years.

The motivation was high level with averages of 3.90 (S.D.=0.37). When considering each factor found that the most averages were responsibility and work itself, which were high level, with averages of 4.07 (S.D.=0.51) and 4.06 (S.D.=0.47), respectively. The least averages were advancements and recognition, which were high level, with averages of 3.52(S.D.=0.64) and 3.86(S.D.=0.55) respectively. Hygiene factors in policy and administration and supervision technical dimension were high levels with averages of 4.15 (S.D.=0.54) and 4.06(S.D.=0.49) respectively. The least averages were salary and personal life, which were high level, with averages at 3.16(S.D.=0.72) and 3.95(S.D.=0.64) respectively.

The key success factors were high level with averages of 3.53(S.D.=0.55). When considering in each factor found that the most averages were people forum and quality development in healthcare and image, which were high level, with averages of 3.68(S.D.=0.68) and 3.61(S.D.=0.66) respectively. The least averages were supporting plan in operation, which was moderate level, and linkage between the health-promoting hospital and central hospital, which was high level, with averages of 3.26(S.D.=0.76) and 3.50(S.D.=0.66), respectively.

Motivation and key success factors relate to the community health center performance which found a positive relationship with 0.05 significant levels.

Overall of motivation represents the positive relationship with the community health center performance at a moderate level with statistical significance (r=0.534, p-value <0.001). Overall of motivator factors found a positive relationship at a moderate level with statistical significance (r=0.529, p-value <0.001). Overall of hygiene factors found a positive relationship at a moderate level with statistical significance (r=0.392, p-value <0.001).

Overall of the key success factors found a positive relationship with the community health center performance at a moderate level with statistical significance (r=0.698, p-value <0.001). When considering in each factors which has positive relationship with the community health center performance at moderate level with statistical significance including organizational support in all level (r=0.492, p-value <0.001), supporting plan in operation (r=0.476, p-value <0.001), people forum (r=0.615, p-value <0.001), quality development in healthcare and image (r=0.635, p-value <0.001) and link between the health-promoting hospital and central hospital (r=0.617, p-value <0.001).

Variables	B	Beta	T	P-value	R	R2	R2-Change
Quality development in healthcare and image	0.168	0.195	2.341	0.020	0.635	0.403	-
Responsibility	0.248	0.222	3.938	<0.001	0.699	0.488	0.085
The linkage between sub-district health promoting hospital and central hospital	0.252	0.290	4.311	<0.001	0.731	0.534	0.046
People forum	0.200	0.239	3.184	0.002	0.748	0.560	0.026
Constant 0.468, F = 55.671, p - value < 0.001, R = 0.748, R <sup>2</sup> =0.560							

**Table 1:** Statistical analysis of stepwise multiple linear regression to community health center performance of sub-district health promoting hospital in Khon Kaen province.

The independent variables affecting the community health center performance. The selected variables into the equation were a statistical significance of less than 0.05. The variables that were selected in the equation including quality development in healthcare and image (p-value = 0.020), responsibility (p-value

<0.001), link between the health-promoting hospital, central hospital ( p-value < 0.001) and people forum ( p-value = 0.002). Four of the independent variables could predict the community health center performance at 56.0 percentages. The multiple linear regression analysis which is predicted in the raw score as follows:

“Y” is community health center performance  
 $Y = 0.468 + (0.168) (\text{quality development in healthcare and image})$   
 $+ (0.248) (\text{responsibility})$   
 $+ (0.252) (\text{link between the health promoting hospital and Central hospital})$   
 $+ (0.200) (\text{people forum})$

### Problems and Suggestions

In addition, the sample replied 47 open-ended questionnaires which have a recommendation about problems and suggestions were at 26.11 percentage. The main problems were budget to support the project was at 46.80 percentage, the second was participation was at 42.55 percentage. On the other hand, the smallest problems section including providing services was at 12.76 percentages, the second was operational with at 19.14 percentages.

Moreover, the in-depth interview showed that the Provincial Health Office and the Contracting of Primary Care Units should provide the effective resource allocation plans to support the project of health promoting hospitals depends on their problems in each area, moreover; to enhance the communication between the linkage of district and sub-district level.

### Conclusion

Motivation has a positive relationship with the community health center performance at a moderate level with statistical significance ( $r=0.534$ , p-value <0.001) because motivation is the effort can lead to the goal including serious effort, persistence, direction to the goal and the need [11]. Thus, motivation is important to the community health center performance of the sub-district health promoting hospital director that will lead to work efficiently. The results of this study had the similar with the result in previous studies that motivation has a positive relationship with the operation of the service provider in the health-promoting hospital [12-15]. The motivation in the sub-district health promoting hospital had a work-related factor in term of operation in which problem occurred or urgent policy. The result was not similar to the other study which found motivation had a positive relationship at a high level with the community health center performance of the sub-district health promoting hospital director [16].

The key success factors have a positive relationship at a moderate level with the community health center performance in the sub-district health promoting hospital director with statistical significance ( $r=0.698$ , p-value <0.001). Because the key success factor is the integral providing service for citizens in all community, moreover; aim to increase community competency [4]. The Key success factor in all dimensions has a positive relationship at a moderate level with the community health center performance. The key success factor was important to the community health

center performance of the sub-district health promoting hospital. The operation must be supported by an administrator, supporting plan and people forum by community participation to quality development in community health care. The results of this study were similar to other studies that key success factor in administrator in all level support dimension found that the positive relationship with the operation of the service provider in the sub-district health promoting hospital in Khon Kaen province [17,18]. Furthermore, the key success factor for the operation of the sub-district health promoting hospital in a different role that affecting the different operation in each organization. In the results of this study was not similar to another study that overall key success factor found the positive relationship at a high level with the operation of a service provider in the sub-district health promoting hospital [19,20].

Factors affecting the community health center performance of sub-district health director in Khon Kaen province including quality development in healthcare and image (p-value = 0.020), responsibility (p-value <0.001), a link between the health-promoting hospital and Central hospital (p-value < 0.001) and people forum (p-value = 0.002). All of these independent variables could predict the community health center performance by 56 percentages. The four factors which affect the community health center performance is the main factor for sub-district health promoting hospital director for operation. The quality development in healthcare and image relate is the one important factor on social satisfaction which relates to social support. Moreover, the information sharing between health promoting hospital and the central hospital can improve the healthcare service in the community. Key success factor in people forum dimension was the operation of parties which included government; private and community in order to contribute operate successfully and gain benefit together. In the results of this study was similar to other studies that motivation factor in responsibility dimension is able to predict the operation of the service provider of the sub-district health promoting hospital [12,13,19,21]. Community health center performance in each area had a different role. This could lead to a prediction of the community health center performance on a different result. The finding was not similar to other studies that organizational support or commander support could predict the operation of a service provider of the sub-district health promoting hospital [17-22].

### Recommendations

Provincial health office and district health office should have quality development in healthcare and image by providing academic meeting to the sub-district health promoting hospital director about planning and development in the community health center for improving academic and operate continuously. Provincial health office and district health office should promote motivation in responsibility dimension to the sub-district health promoting hospital director for work satisfaction and the best benefit to citizens which is the important role and responsibility lead to succeed in operation.

Provincial health office and district health office should promote



the sub-district health promoting hospital to share information between the health-promoting hospital and central hospital to support information system in the community health center in central hospital. Provincial health office and district health office should promote the sub-district health promoting hospital to operate the health development plan by people forum for community participation and sustainable operation.

### Recommendations for Future Research

Should be study of the factor affecting quality development in healthcare and image to apply in operation in the sub-district health promoting hospital. Should be studying factor affecting management and participation to link between the health-promoting hospital and central hospital.

### Acknowledgement

The researcher would like to express sincere thanks to the Faculty of Public Health Khon Kaen University for supporting both the materials and the budget throughout the period of this research.

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