



The Participation in Health Promotion of Health Personnel in Community Hospitals Roi Et province, Thailand

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Abstract

This cross-sectional descriptive research aims to study the participation in health promotion and identify motivation and organizational supports that affect the participation in health promotion of health personnel in community hospitals in Roi Et province, Thailand. Two research instruments used were a self-administered questionnaire and an in-depth interview guideline. The Cronbach's alpha value of the questionnaire was 0.98. After approved for ethical review, 100 questionnaires were sent to the participants. Twelve key informants were then appointed for the in-depth interview. The data collection was carried out from January to February, 2014. Descriptive statistics, Pearson's correlation and stepwise multiple linear regression were performed for data analysis. The findings from the interview were evaluated by content analysis approach. The findings revealed that the level of participation in health promotion of the health personnel was high (3.86 ± 0.50). Correlation analysis showed a high positive relationship between motivation and the participation in health promotion at statistically significant level ($r = 0.805$, $p\text{-value} < 0.001$) and a moderate positive relationship between organizational supports and the participation in health promotion at statistically significant level ($r = 0.577$, $p\text{-value} < 0.001$). The regression model showed that there were five factors predicting the participation in health promotion approximately 65.4 percent, namely, personal life ($r^2 = 0.440$, $p\text{-value} = 0.045$), management ($r^2 = 0.548$, $p\text{-value} = 0.020$), recognition ($r^2 = 0.597$, $p\text{-value} = 0.012$), advancement ($r^2 = 0.623$, $p\text{-value} = 0.002$) and interpersonal relationship ($r^2 = 0.654$, $p\text{-value} = 0.004$). The findings in this study indicated that most problems (77.7 percent) related to personnel motivation. This study recommended that work guidelines must be clear and promote teamwork. Organization structures should be well organized, personnel morale should be maintained, career advancement must be carefully designed, and the chance of participation in planning and evaluating stage should be provided. These could improve motivation, organizational supports and participation.

Keywords : *Community Hospital, Participation in Health Promotion, Health Personnel, Organizational Supports, Motivation*

1. Introduction

The changes in our society such as environmental changes, risk behaviors, consumption patterns, family structure, population structure, and health inequity, are crucial factors influencing the Thai healthcare system (1). To improve the system effectiveness, health organizations now turn their focus on health promotion and the coordination among individuals, communities, health professionals, and health facilities (2). According to the rise of Good Governance scheme in Thailand, the participation between government officials and stakeholders has been increasingly promoted (3). In this situation, participation is an important key because individuals or groups can provide their contribution in activities which eventually increase organization commitment (4). Participation also provides opportunities for everyone to participate and take responsibility (5). In the health promotion context, participation also leads to economic development and a high quality of life because it is a tool that promotes both innovation and creation. Participation can be defined as participation in searching problem and solution (6), planning, acting, evaluating (7), and responsibility (8).

Herzberg et al. stated that there are two separated parts of motivation in workplace (9). The first part is the motivator factor consisting of achievement, recognition, work itself, responsibility, and advancement. The second part is the hygiene factor consisting of salary, interpersonal relationship, advisory, work policy, work condition, work status, job security and personal life. Motivation is a vital factor because it is the source of desired workplace behaviors such as devotion, determination, effort, creation,

and commitment (10). A previous study in community hospitals in Pathum Thani also indicated that motivation has a positive relationship with the performance of registered nurses (11). Another vital factor affecting participation is organizational supports. Organizational supports can increase the confidence of personnel and the participation effectiveness. Resources, which are required for standard services, can increase participation in organizations (12). Man, money, material and management are widely accepted as primary resources for administration (13). The effectiveness and efficiency of administration depend on the completeness and quality of these supports (14). A previous study showed that three organizational supports, namely man, money and management, had a positive moderate relationship with the core competency performance of registered nurses in community hospitals in Udon Thani (15). Another study also showed that organizational supports had a positive moderate relationship with the epidemiological performance of health technical officers (16).

In Thailand, most health organizations are responsible for four major services: health promotion, disease prevention, treatment and rehabilitation. These services are actively and passively provided by multi-professional teams. However, there are numbers of persistent problems in health promotion services. In 2013, there were services that were unable to meet the healthcare standards of Roi Et province; for example, skills training in maternal and child care, healthy community project, cervical cancer screening, and non-communicable diseases screening (17). In situations like this, health personnel must work as a team and health organizations

must systematically cooperate with stakeholders. Teamwork in planning, information sharing and problem solving is definitely required (18). In this context, continuous and consistent participation of health personnel can lead to the increased effectiveness of healthcare services. From this point of view, the researchers studied motivation and organizational supports that affect participation in health promotion of personnel in community

hospitals in Roi Et province. The problems and suggestions in this topic are explored. The findings from this study could be used to develop the participation in health promotion in the province. The conceptual framework of the study was based on 12 motivation factors of Herzberg (9), four organizational support factors of Bangmo (13), and five participation factors of Rapeepat (6), King Prajadhipok’s Institute (7) and Newstrom (8) as shown in Figure 1.

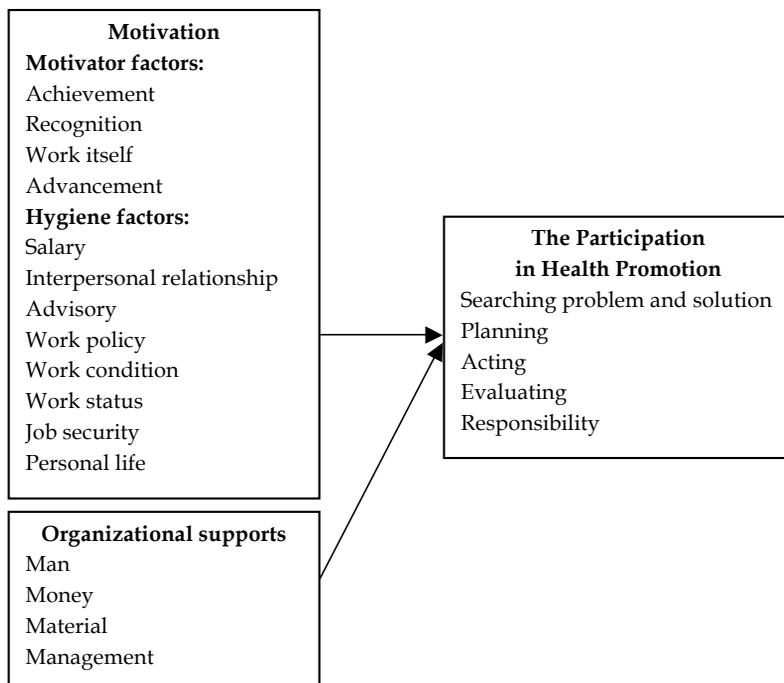


Figure 1. Conceptual framework of the study

2. Materials and methods

This present study was a cross-sectional research collecting both quantitative and qualitative data in community hospitals of Roi Et province in Thailand. Motivation and organizational supports were studied as independent variables while participation was studied as dependent variable.

2.1 Samplings

There were two groups of participant in this study. The first group provided quantitative data while the second one provided qualitative data. The total number of population for the first group was 127 health personnel who work in family practice departments in 16 Roi Et community hospitals (17). They were nurses, public

health technical officers and public health officers. The sample size was carefully calculated using the mean estimation formula as shown below (19). The desired sample size for the first group was 100.

$$n = \frac{NZ_{\alpha/2}^2\sigma^2}{e^2(N-1) + Z_{\alpha/2}^2\sigma^2}$$

when n = Sample size
 N = Population size (127)
 $Z_{\alpha/2}^2$ = Standard normal distribution value at 95% confidence ($Z_{\alpha/2}$ or $Z_{0.025} = 1.96$)
 e = Allowable error (0.05)
 σ = Variance from a previous study (20)

$$n = \frac{127(1.96)^2(0.55)^2}{(0.05)^2(127-1) + (1.96)^2(0.55)^2} = 99.52 \cong 100$$

The sampling method for this group used a multi-stage approach. The first stage was proportional sampling. The population was then divided into strata in which the members in each stratum shared similar characteristics (21). Then, the sample size was made of the proper proportion of each stratum. After that, the simple random sampling method was applied. The sampling method for the second group used a purposive sampling. Twelve key informants, who work as the head of family practice departments, were purposively selected for the in-depth interview.

2.2 Research Instruments

There were two research instruments in this study. The first one was a self-administered questionnaire while the second one was an in-depth interview guideline. The self-administered questionnaire was comprised of five parts. The first part collected six personal

characteristics which were sex, age, marital status, education, position and work in time. The second part was comprised of 51 items toward motivation. The third part was comprised of 24 items collecting data about organizational supports. The fourth part was comprised of 25 items collecting data of participation in health promotion. A Likert scale approach was used to measure the level of motivation, organizational supports and participation in the second, third and fourth parts respectively. The questionnaire respondents rated the extents to which they agreed with each item on a five-point of Likert-type scale, ranging from strongly disagree to strongly agree by choosing only one response (22). The weighted score method was then used to interpret the degree of agreement ranging from "very low" to "very high". The scores "very low" referred the score to be 1.00 to 1.49, "low" referred the score to be 1.50 to 2.49, "moderate" referred the score to be 2.50 to 3.49, "high" referred the score to be 3.50 to 4.49 and "very high" referred the score to be 4.50 to 5.00 (23). The fifth part was comprised of three items collecting data about problems and suggestions. The in-depth interview guideline was comprised of 11 open-ended questions. The interview guideline was designed to collect information corresponding to the findings from the questionnaire. The first two items collected data about motivation. The next four items collected data about organizational supports. The last five items collected data about the participation in health promotion. The questionnaire was examined by three experts for content validity. It was then tested for reliability in similar samples ($n = 30$) in community hospitals in Kalasin and Cronbach's alpha coefficient of the questionnaire was 0.98.

2.3 Data Collection

The data collection was conducted from January 15 to February 15, 2014. After the protocol was approved by Khon Kaen University Ethics Committee in Human Research, the researchers directly mailed the questionnaire to the participants and attached a blank envelope with a stamp for the return of the questionnaire. For the in-depth interview, the researchers sent a letter to notify the key informants. The appointments were made after the informants agreed to participate in the study.

2.4 Data Analysis

SPSS for Windows, version 19, was used to analyze quantitative data while content analysis was used to analyze qualitative data. Descriptive statistics, including frequency, percentage, mean, standard deviation, median, minimum, and maximum were used to describe the participants characteristics. Pearson's correlation coefficient was used to identify the relationship between motivation, organizational supports and the participation in health promotion practice. Stepwise multiple linear regression was used to perform the predict model. The meaning criteria for the level of correlation coefficient (r) was divided by the values ranging from -1 to +1, which was given by "no correlation" referred r to be 0, "weak correlation" referred r to be ± 0.01 to ± 0.30 , "moderate correlation" referred r to be ± 0.31 to ± 0.70 , "strong correlation" referred r to be ± 0.71 to ± 0.99 and "perfect correlation" referred r to be ± 1.00 (24).

2.5 Ethical Consideration

This study protocol was reviewed for ethical issues based on the Declaration of Helsinki and the ICH Good Clinical Practice Guidelines by Khon Kaen University Ethics Committee in Human Research. It was approved on January 7, 2014. The reference code was HE562311.

3. Results and discussion

3.1 Results

3.1.1 Demographic Characteristics of the Respondents

Most participants were female (78%). Approximately 46 percent of them aged from 41 to 50 years old. The average mean age was 42 years (42.36 ± 9.20). The youngest one was 23 years old while the oldest was 59 years old. Most of participants were married (77%). About 59 percent of the participants were registered nurses. The average mean of working experience was 14 years (14.65 ± 9.66 , median = 13). The working experience ranged from 1 to 39 years. About 42 percent of them had working experiences ranging from 1 to 10 years.

3.1.2 The Level of Motivation

The overview of motivation level was high (3.80 ± 0.40). The levels of motivator factor and hygiene factor were also high (3.89 ± 0.44 and 3.70 ± 0.46 respectively). When looking at the components of motivator factor, work itself was the highest (4.23 ± 0.60) followed by achievement (4.01 ± 0.46), while the lowest was advancement (3.38 ± 0.75). For the components of hygiene factor, the highest one was interpersonal relationship (4.09 ± 0.56) followed by work status (3.94 ± 0.59), while the lowest was salary (2.87 ± 0.69). The details were shown in Table 1. The findings from the in-depth interview revealed that advancement of health personnel who work in health promotion was limited because of professional differences. The key informants suggested that, to motivate health personnel, the outcomes of task groups should be included as one of the job promotion criteria.

Table 1. Mean and S.D. of the Motivation

Motivation	Mean	S.D.	Interpret
Motivator factors	3.89	0.44	High
Achievement	4.01	0.46	High
Recognition	3.93	0.48	High
Work itself	4.23	0.60	High
Advancement	3.38	0.75	Moderate
Hygiene factors	3.70	0.46	High
Salary	2.87	0.69	Moderate
Interpersonal relationship	4.09	0.56	High
Advisory	3.65	0.64	High
Work policy	3.71	0.69	High
Work condition	3.72	0.67	High
Work status	3.94	0.59	High
Job security	3.76	0.67	High
Personal life	3.91	0.61	High
Total	3.80	0.40	High

3.1.3 The Level of Organizational Supports

As a whole, the level of organizational supports was high (3.61 ± 0.56). When looking at the components, the highest was material (3.71 ± 0.72) followed by management (3.67 ± 0.61) while the lowest was man (3.41 ± 0.71). The details were shown in Table 2. The findings from

the in-depth interview showed that clear work process can improve the effectiveness of health promotion activities. The interviewees suggested that the activities should be specifically created to solve the area-based problems. In addition, man support should be sufficiently provided and the human resource management plan should also provide essential skills training.

Table 2. Mean and S.D. of Organizational Supports

Organizational supports	Mean	S.D.	Interpret
Man	3.41	0.71	Moderate
Money	3.66	0.60	High
Material	3.71	0.72	High
Management	3.67	0.61	High
Total	3.61	0.56	High

3.1.4 The Level of Participation in Health Promotion

The level of participation was high (3.86 ± 0.50). When looking at the components, participation in responsibility was highest (4.00 ± 0.52) followed by participation in acting (3.98 ± 0.57) while the lowest was participation in planning (3.74 ± 0.63). The details were shown in

Table 3. The findings from the in-depth interview showed that the projects time frame in health promotion should be clearly defined. The key informants suggested that front line personnel should be provided sufficient opportunity to participate in the policy making process. This would help in clarifying demands and problems in the affected areas.

Table 3. Mean and S.D. of the Participation in Health Promotion

Participation in health promotion	Mean	S.D.	Interpret
Searching problem and solution	3.82	0.61	High
Planning	3.74	0.63	High
Acting	3.98	0.57	High
Evaluating	3.77	0.62	High
Responsibility	4.00	0.52	High
Total	3.86	0.50	High

3.1.5 Problems and Suggestions

The findings from the open-ended questionnaires revealed that 57.4 percent of the problems related to the motivator factors while 51.8 percent related to the hygienic factors. The major problem was about achievement. About 5.5 percent related to responsibility issues. The questionnaire respondents suggested that it was difficult to measure the outcomes of health promotion because most activities required continuous operation and long-term performance. Moreover, many activities were proactive and they required cooperation from all stakeholders. These sometimes made health personnel feel discouraged. The findings also suggested that the framework of health promotion projects should be clear and relevant to activities. In addition, teamwork, network and participation are vital factors for health promotion.

3.1.6 Relationship between Motivation and Organizational Supports and Participation in Health Promotion

Pearson product moment correlation was performed to identify the relationship between motivation, organizational supports and the participation in health promotion. The findings showed that motivation had a positive high relationship with the participation in health promotion at significant level ($r = 0.805$, $p\text{-value} < 0.001$). In addition, motivator factors, as a whole, had a positive moderate relationship with the participation at significant level ($r = 0.702$, $p\text{-value} < 0.001$). Hygiene factors, as a whole, had a positive high relationship with the participation at significant level ($r = 0.744$, $p\text{-value} < 0.001$). Four components of motivator factors, namely achievement, recognition, work itself and advancement, had a positive moderate relationship

with the participation at significant level ($r = 0.572$, $p\text{-value} < 0.001$, $r = 0.621$, $p\text{-value} < 0.001$, $r = 0.376$, $p\text{-value} < 0.001$, and $r = 0.602$, $p\text{-value} < 0.001$ respectively). When looking closely at hygiene factors, all eight components, namely salary, interpersonal relationship, advisory, work policy, work conditions, work status, job security, and personal life, had a positive moderate relationship with the participation at a significant level ($r = 0.427$, $p\text{-value} < 0.001$, $r = 0.582$, $p\text{-value} < 0.001$, $r = 0.467$, $p\text{-value} < 0.001$, $r = 0.578$, $p\text{-value} < 0.001$, $r = 0.527$, $p\text{-value} < 0.001$, $r = 0.581$,

$p\text{-value} < 0.001$, $r = 0.477$, $p\text{-value} < 0.001$, and $r = 0.663$, $p\text{-value} < 0.001$ respectively). Organizational supports had a positive moderate relationship with the participation at a significant level ($r = 0.577$, $p\text{-value} < 0.001$). Man, money, materials, and management had a positive moderate relationship with the participation at significant level ($r = 0.464$, $p\text{-value} < 0.001$, $r = 0.546$, $p\text{-value} < 0.001$, $r = 0.353$, $p\text{-value} < 0.001$, $r = 0.635$, $p\text{-value} < 0.001$ respectively). The details were shown in Table 4.

Table 4. Relationship between Motivation & Organizational supports and the Participation in Health Promotion

Motivation and Organizational supports	Correlation coefficient (r)	p-value	Relationship level
Motivation	0.805**	<0.001	High
Motivator factors	0.702**	<0.001	Moderate
Achievement	0.572**	<0.001	Moderate
Recognition	0.621**	<0.001	Moderate
Work itself	0.376**	<0.001	Moderate
Advancement	0.602**	<0.001	Moderate
Hygiene factors	0.744**	<0.001	High
Salary	0.427**	<0.001	Moderate
Interpersonal relationship	0.582**	<0.001	Moderate
Advisory	0.467**	<0.001	Moderate
Work policy	0.578**	<0.001	Moderate
Work condition	0.527**	<0.001	Moderate
Work status	0.581**	<0.001	Moderate
Job security	0.477**	<0.001	Moderate
Personal life	0.663**	<0.001	Moderate
Organizational supports	0.577**	<0.001	Moderate
Man	0.464**	<0.001	Moderate
Money	0.546**	<0.001	Moderate
Material	0.353**	<0.001	Moderate
Management	0.635**	<0.001	Moderate

** Significant level <0.01

3.1.7 Predictors of Motivation and Organizational Supports Towards Participation in Health Promotion

Stepwise multiple linear regression analysis was performed to find if there was any significant predictor of motivation and organizational supports towards the participation in health promotion. Twelve components of motivation and four organizational supports were entered and removed to fit the predict model. However, there were only five significant factors fitting the model. With the highest standardized coefficient, personal life was the first factor chosen into the predict model (p-value = 0.045,

$r^2 = 0.440$), followed by management (p-value = 0.020, $r^2 = 0.548$), recognition (p-value = 0.012, $r^2 = 0.597$), advancement (p-value = 0.002, $r^2 = 0.623$) and interpersonal relationship respectively (p-value = 0.004, $r^2 = 0.654$). Together, all these five factors could predict the participation in health promotion at 65.4 percent ($r^2 = 0.654$, p-value < 0.05) as shown in Table 5. An equation of the predict model was shown as follows.

$$Y = 0.465 + (0.147) (\text{personal life}) + (0.160) (\text{management}) + (0.210) (\text{recognition}) + (0.169) (\text{advancement}) + (0.205) (\text{interpersonal relationship})$$

Table 5. Regression Coefficient between factors chosen in Stepwise Multiple Linear Regression predict the Participation in Health Promotion

Factors	B	Beta	t	p-value	R	R ²
Personal life	0.147	0.180	2.030	0.045	0.663	0.440
Management	0.160	0.193	2.366	0.020	0.741	0.548
Recognition	0.210	0.202	2.556	0.012	0.773	0.597
Advancement	0.169	0.254	3.209	0.002	0.789	0.623
Interpersonalrelationship	0.205	0.230	2.916	0.004	0.809	0.654
Constant value = 0.465, F = 35.551, p-value < 0.001, R = 0.809, R ² = 0.654						

3.2 Discussion

As a whole, the motivation level was high (3.80 ± 0.40). This finding was in line with the study conducted in sub-district health promoting hospitals in Khon Kaen (25) but not in line with the study conducted in a community hospital in Pathum Thani (11). In Roi Et province, workload payment was used as one of main incentives to increase productivity in health promotion. However, this incentive still varies and depends on activities and hospital contexts. Although the personnel who work in health promotion believed that

the workload payment was low and did not cover most activities, they were still motivated. The findings from the in-depth interview pointed out that most personnel were proud of their work. They believed that they help people become more healthy and self-dependent. This may be the reason why the motivation level of the participants was high. To maintain and increase motivation level, there are some points that should be considered. Teamwork and good relationships among health professionals are very important. The assigned tasks should not interfere with their personal life.

The policy of health promotion must be clear and the activities must be relevant to the problems in the areas. Lastly, the morale of personnel should be continuously maintained.

The level of organizational supports in this study was high (3.61 ± 0.56). This was consistent with the studies conducted in sub-district health promoting hospitals in Udon Thani (26) and Khon Kaen (27). Organizational supports, also known as man, money, materials and management, are one of key success factors. Personnel who work in health promotion perceived that the effectiveness of their work depended on the sufficiency of organizational supports, especially manpower. Skilled workforces are also keys to the productivity. Skills training should be provided to personnel. Careful human management plan is essential to increase the success of health promotion.

The level of participation in health promotion of this study was high (3.86 ± 0.50). This was in line with the study conducted in Khon Kaen (28), but not in line with the study conducted in Prachin Buri (29). In this study, the level of participation in planning was the lowest among five components. This was strongly supported by the findings from the in-depth interview that personnel had less chance in developing and defining the health promotion plans and policies. The leaders should provide the personnel more chance in these process and also discuss their feedback. Participation is a vital key to work development. It also increases enthusiasm, raises satisfaction, decreases conflicts, and solves work problems. High participation also makes personnel feel more valued and raises the sense of organizational belonging.

Motivation was found to have positive high relationship with the participation in health promotion at statistically significant level ($r = 0.805$, $p\text{-value} < 0.001$). This direct relationship was supported by the concept in management and organizational behavior (30). Motivation makes people proud of their jobs, increases participation, and makes people apply more effort to their work. Motivation also shares a close relationship to personal performance. Leaders should apply an appropriated motivation approach to their organizations. The finding in this study was in line with previous studies done in two community hospitals and one regional hospital (20), (31), and (32). However, it was not in line with the study done in health centers in Khon Kaen (33). The reason here may lie in the differences of type and size of organizations.

In this study, organizational supports had a positive moderate relationship with the participation in health promotion at a statistically significant level ($r = 0.577$, $p\text{-value} < 0.001$). This finding was consistent to the studies conducted in community hospitals in Kalasin (20) and Public Health Region 10 (34). However, it was not consistent with the studies conducted in the office of DPC6 in Khon Kaen (27) and community hospitals in Public Health region 12 (35). The direct relationship between organizational supports and participation found in this study confirmed the concept of administrative resources. The effectiveness and efficiency of any operation depend on the quality and sufficiency of resources (14). Organizational supports, in term of man, money, materials and management, can promote the personnel's participation.

Stepwise multiple linear regression analysis revealed that personal life, management, recognition, advancement and interpersonal relationships significantly affected the participation in health promotion at statistical level (p-value = 0.045, p-value = 0.020, p-value = 0.012, p-value = 0.002, and p-value = 0.004 respectively). Together, all these five factors could predict the participation at 65.4 percent ($r^2 = 0.654$, p-value < 0.05). Many previous studies also found that motivation and organizational supports had significantly effect on the personnel participation in various health organizations (20), (28), (33), (35), (36), (37). The findings of this study indicated that, to promote participation in health promotion among personnel in community hospitals, the leaders should focus on these five factors. Assigned tasks from the workplace should not interfere with personal life. Work life balance should be maintained. Management in health promotion activities must be clear to ensure that the personnel can fulfill the tasks required. Recognition can be effectively used as one of the incentives. Encouragement or complimenting should be appropriately made when the personnel perform their jobs well. Growth and expansion in the workplace are strong influences for most personnel. Advancement in the career of the personnel should be included in human development plans. Lastly, the relationship among personnel should be healthy and carefully maintained.

4. Recommendations

To improve motivation, organizational supports and the participation of personnel who work in health promotion in community hospitals, these following points are recommended.

1) Work guidelines in health promotion should be clear and provide more chance of working in community. The guidelines should also promote multi-professional teamwork.

2) Hospital leaders should focus more on their management especially in terms of organizing. The structure of organization should be relevant to the missions, the problems in their areas and the provincial indicators.

3) Hospital leaders should promote the morale of personnel by offering rewards or recognition.

4) Equal opportunities for career advancement should be provided to the personnel who work in health promotion as those in other fields. The promotion criteria should include the outcomes of assigned tasks.

5) To make health promotion activities more relevant to the problems in the areas, hospital leaders should provide opportunities for the personnel to participate in the stages of planning and evaluating.

5. Conclusion

The findings in this study indicated that the motivation level was high. This reflected a healthy internal force of personnel in health promotion. The level of organization supports was also high. It implied that community hospitals provided sufficient resources to the personnel. The participation level was high reflecting that the personnel were given chance to participate in shaping their work. The direct relationship between motivation, organizational supports and participation found in this study was supported by the concept of organizational behaviors. The predict model indicated that five

factors, personal life, management, recognition, advancement and interpersonal relationships, together could forecast the participation in health promotion of health personnel in community hospitals in Roi Et province at 65.4 percent.

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