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Mental Health and Psychiatric Practice of Health Personnel in Sub-district Health Promoting Hospitals, Khon Kaen Province

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Abstract

This descriptive cross-sectional research aimed to explore the factors affecting mental health and psychiatric practice personnel who working in sub-district health promoting hospitals, Khon Kaen Province. 115 subjects were selected using multistage random sampling. The research instruments were an in-depth interview guideline and a structural questionnaire, which were approved for content validity by three experts. The Cronbach's alpha coefficient of the questionnaire was 0.92 which suggests an acceptable level of reliability level. Data collection was carried out from 14 to 28 February, 2012. SPSS data analysis software was used to perform descriptive statistics, Pearson Product-Moment Correlation and Multiple Linear Regression. The results showed that the level of mental health and psychiatric practice is high (3.55±0.48). Regression analysis identified four factors, namely, working itself, working conditions, responsibility, and achievement. These four factors together were able to predict 59.9 percent of mental health and psychiatric practice at a statistically significant level (p-value < 0.05).

Keywords: Motivation, Mental health and psychiatric practice, Sub-district health promoting hospital

1. Introduction

A collaborative study done by the World Health Organization, World Bank, and Harvard University indicated that noninfectious diseases relating to behavior and life style will emerge as new health problem within the next 20 years (1). Heart disease will become a top priority in health agenda as well as mental health problems, such as depression. In Thailand, Department of Mental Health revealed that the number of mental patients had increased from 1,022,504 in 2009 to 1,055,548 in 2010 (2). In Khon Kaen, 2010, a report showed that there were 82 cases of successfully committed suicide (4.65% per 100,000). It did not exceed the Ministry of Public Health indicator; however, the number of attempts to committed suicide was relatively high (431 cases, 24.42% per 100,000) (3). These figures reflect the position that mental health problems in the Thai community should not be underrated.

Mental health and psychiatric practice in community is a vital key to cope with these problems by improving mental health status, which finally leads to peaceful society. However, to achieve this goal, certain components are demanded, especially human resources. Health personnel, especially in sub-district health promoting hospitals, play an important part as they are those who technically work in the community. Additionally, certain community psychiatric knowledge, attitudes and skills are also required. Generally, mental health and psychiatric practice in the community focus much more on promotion and prevention, rather than treatment and rehabilitation. With appropriate methods, mental health instruction and counseling can be provided to healthy population in order to prevent mental health problem in community and promote mental well-being (4). There are two principle methods used to promote mental health and psychiatric practice in the context of sub-district health promoting hospitals. Firstly, the direct method includes activities such as mental health instruction, problem-solution counseling, stress screening tests, and mental health development exercises. Secondly, the indirect method includes activities such as income support, social welfare, recreation, community participation-based mental health services (5). However, there are some problems involving mental health and psychiatric practice in sub-district health promoting hospitals, for example, the difficulty of integration to other health practices and the requests for a specialist in treatment and rehabilitation. These problems frequently lead to the changing of the person in charge. Without a person in charge, consequent problems may arise, for instance, inaccessibility to mental health services and network failure (6). In addition, a monitoring report had revealed a problem among those persons in charge, in that they felt they were being neglected by the system.

Health personnel, assigned as the person in charge, are supposed to perform these two methods properly and overcome problems in order to achieve their goals. However, a large number of various factors influences their performance (7), for example, personal attributes, demographics, competency, and psychological characteristics. Hygiene and motivation of individuals are also potential contributors to their performance (8). Thus, to provide more insight to this field, this study aims to explore two factors, namely, personal attributes and the motivation affecting mental health and psychiatric personnel working in sub-district health promoting hospitals in Khon Kaen province.

2. Materials and methods

This research is a cross-sectional descriptive study collecting both quantitative and qualitative data in order to examine the psychiatric practice of mental health personnel in sub-district health promoting hospitals in Khon Kean.

2.1 Population and sample

The population in this study was 248 health personnel authorized as persons in charge for mental health and psychiatric practice in sub-district health promoting hospitals, Khon Kaen Province (9). They consisted of public health technical officers, registered nurses, public health officers, dental health officers, and other employees in paramedical field. The calculation for proper sample size (n) was performed as the population size was known using the following formula (10).

$$n = \frac{NZ^2_{\alpha/2}s^2}{e^2(N-1) + Z^2_{\alpha/2}s^2}$$

Where:

$N = 248$

$Z_{\alpha/2}$ = Standard value under the curve at 95% confident interval ($Z_{\alpha/2}$ or $Z_{0.025} = 1.96$)

e = Standard Error that allowed to occur and 0.05 was set as an acceptable level

σ = The standard deviation from a pilot study which was 0.37

n = 115

115 health personnel were then chosen using multistage random sampling method. 12 health personnel were purposively chosen as key informants according to their outstanding knowledge and performance in the fields of mental health and psychiatric practice. Each two of them represent six areas of the province according to zoning established by the Khon Kaen Provincial Public Health Office.

2.2 Research instruments

There were two instruments; a questionnaire and an in-depth interview developed by the researcher. They were examined first by the advisor and then three experts, for content validity pertaining to objectives and linguistic appropriateness. All feedback had been gathered for correction. Both research instruments were then approved by the KKU Ethical Committee. The questionnaire comprised four parts; personal attributes (6 items), motivation (76 items), mental health and psychiatric practice in sub-district health promoting hospitals (30 items), and problems and suggestions (4 items). The structure of the second part was based on Herzberg's Two Factors theory while the third part was based on two general methods employed in the mental health and psychiatric practice for sub-district health promoting hospitals. The questionnaire showed a high reliability with an overall Cronbach's Alpha of 0.92. The in-depth interview guideline consisted three parts; motivation (2 items), mental health and psychiatric practice in sub-district health promoting hospitals (9 items), and problems and suggestions (2 items). For the scoring method in this instrument, the data was first examined for accuracy and completeness. Later, the data was categorized and interpreted. A pilot study in a similar population was conducted in the Roi Et Province. The findings also contributed to the standard deviation for the sample size calculation.

2.3 Data collection

In order to acquire approval from the Khon Kaen Provincial Chief Officer, the letter requesting permission from Khon Kaen University was formally delivered. Upon approval by the KKU Ethical Committee on January 31, 2012, (HE 542293) the data collection was then carried out (from 14 to 28 February 2012). Appointments were made for In-depth interviews and the 12 key informants were informed of the topics of the interview.

2.4 Data Analysis

SPSS data analysis software was used to perform both descriptive and inferential statistics. Percentage, mean, standard deviation, median, 25^{th} and 75^{th} percentiles, as well as minimum and maximum value were used to describe personal attributes (Table 1), motivation levels (Table 2), and mental health and psychiatric practice levels (Table 3). Pearson Product-Moment Correlation (Table 4) and Stepwise Multiple Linear Regression were used to determine relationship analysis and prediction analysis respectively (Table 5). Quantitative data was interpreted by Likert's rating method as follow: 4.50-5.00 refers to a highest; 3.50-4.49 refers to a high; 2.50-3.49 refers to a medium; 1.50-2.49 refers to a low; and 1.00-1.49 refers to a lowest (11). Qualitative data was fist examined for accuracy and completeness. Later, the data was categorized and interpreted.

3. Results and discussion

3.1 Results

Personal attributes (Table 1)

Table 1 Personal attributes of health personnel in sub-district health promoting hospitals, Khon Kaen Province

Personal attribute		Number (n = 115)	Percent
Gender	Male	12	10.4
	Female	103	89.6
Age (year)	21-30	27	23.5
	31-40	39	33.9
	41-50	40	34.8
	51-60	9	7.8
	Mean = 38.53 S.D. = 8.72		
	Minimum = 22 Maximum = 60		
Education	Below bachelor's degree	9	7.8
	Bachelor's degree	98	85.2
	Master's degree	8	7.0
Position	Public health technical officer	26	22.6
	Registered nurse	69	60.0
	Community public health officer	18	15.6
	Dental public health officer	1	0.9
	Others	1	0.9
Experience (year)	1-5	64	55.7
	6-10	32	27.8
	More than 10	19	16.5
	Mean = 6.83 S.D. = 6.23		
	Median = 5 Minimum = 1 Maximum = 33		
Training	No	31	27.0
	Yes	84	73.0
	1-3 times	74	88.1
	4-6 times	7	8.3
	More than 7 times	3	3.6
	Mean = 2.21 S.D. = 2.56		
	25^{th} Percentile = 1.0, 75^{th} Percentile = 2.0		
	Minimum = 1 Maximum = 16		

The findings revealed that 89.6% of the sample were female. Ages ranged from 22-60 years old (38.53 ± 8.72). Approximately 85.25% possessed at least a Bachelor's degree and 60% of the sample were registered nurses. Furthermore, 55.7% had one to five years of experience in mental health and psychiatric practice (Median = 5.00). In addition, 88.1% had been trained for mental health and psychiatric practice at least one to three times (25^{th} percentile = 1.00, 75^{th} percentile = 2.00).

Motivation level in mental health and psychiatric practice (Table 2)

Table 2 Motivation levels in mental health and psychiatric practice

Motivation	Mean	S.D.	Level
Motivation Factors	3.67	0.41	High
Achievement	3.59	0.47	High
Recognition	3.66	0.52	High
Work itself	3.88	0.52	High
Responsibility	3.71	0.51	High
Advancement	3.51	0.62	High
Hygiene factors	3.34	0.47	Moderate
Salary	2.33	0.71	Low
Interpersonal relationship	3.61	0.60	High
Supervision	3.41	0.59	Moderate
Policy and administration	3.58	0.62	High
Working condition	3.31	0.59	Moderate
Status	3.64	0.61	High
Job security	3.34	0.65	Moderate
Personal life	3.53	0.54	High
Total	3.51	0.49	High

The findings shown that the total motivational level was high (3.51±0.49). The level of motivation factors was high (3.67 ± 0.41) while the level of Hygiene factors was moderate (3.34 ± 0.47). The highest motivation factor was work itself (3.88 ± 0.52). The second highest was responsibility (3.71 ± 0.51). Third and fourth were recognition (3.66 ± 0.52) and status (3.64 ± 0.61) respectively. The fifth was interpersonal relationship (3.61±0.60). The lowest was salary (2.33 ± 0.71).

Mental health and psychiatric practice level (Table 3)

Table 3 Levels of mental health and psychiatric practice of health personnel working in sub-district health promoting hospitals, Khon Kaen Province

Mental health and psychiatric practice	Mean	S.D.	Level
Direct methods	3.63	0.50	High
Mental health instruction	3.59	0.57	High
Problem-solution counseling	3.70	0.53	High
Stress screening	3.80	0.66	High
Mental health promotion through exercises	3.46	0.72	Medium
Indirect methods	3.37	0.56	Moderate
Integrative approach	3.58	0.56	High
Income support	2.92	0.93	Moderate
Social welfare	3.42	0.60	Moderate
Recreation	3.29	0.80	Moderate
Community participation-based mental health services	3.65	0.62	High
Total	3.55	0.48	High

The findings revealed that the level of mental health and psychiatric practices was high (3.55 ± 0.48). Specifically, the direct method was high (3.64 ± 0.50) while the indirect method was moderate (3.64 ± 0.50). When looking closely at each aspect of the direct method, it was found out that the levels of stress screening, test, problem solution counseling, and mental health instruction were high (3.80 ± 0.66, 3.70 ± 0.53 and 3.59 ± 0.57 respectively). For the indirect method, the level of integrative mental health and psychiatric practice was high (3.58 ± 0.56). However, the levels of income support and recreation were moderate (2.92 ± 0.93 and 3.29 ± 0.80 respectively).

Personal attributes and motivation that relate to mental health and psychiatric practice (Table 4)

Table 4 Pearson Product-Moment Correlation Coefficient Analysis of factors that relate to mental health and psychiatric practice of health personnel, working in sub-district health promoting hospitals, Khon Kaen Province

Personal attributes & Motivation factors	Mental health and psychiatric practice		
	r	p-value	Relationship level
Personal attributes			
Gender (F)	-0.054	0.569	No relationship
Age	0.051	0.585	No relationship
Education (Bachelor)	-0.202*	0.030	Low
Position (RN)	-0.026	0.786	No relationship
Experience	0.205*	0.028	Low
Training	0.083	0.378	No relationship
Motivation	0.719**	<0.001	High
Motivation factors	0.693**	<0.001	Moderate
Achievement	0.553**	<0.001	Moderate
Recognition	0.539**	<0.001	Moderate
Work itself	0.588**	<0.001	Moderate
Responsibility	0.548**	<0.001	Moderate
Advancement	0.487**	<0.001	Moderate
Hygiene factors	0.606**	<0.001	Moderate
Salary	0.302**	<0.001	Moderate
Interpersonal relationship	0.334**	<0.001	Moderate
Supervision	0.449**	<0.001	Moderate
Policy and administration	0.551**	<0.001	Moderate
	0.583**	<0.001	Moderate
Work condition	0.492**	<0.001	Moderate
Status	0.557**	<0.001	Moderate
Job security	0.447**	<0.001	Moderate
Personal life			

** Significant level lower than 0.01

* Significant level lower than 0.05

The findings revealed that there was a low negative correlation between education and mental health and psychiatric practice at a statistically significant level (r = -0.202, p-value = 0.03). Experience had a low positive correlation with mental health and psychiatric practice at a statistically significant level (r = 0.205, p-value = 0.028). The findings also revealed that gender, age, position, and training had no correlation with mental health and psychiatric practice. The findings also indicated that there was a high positive correlation

between motivation and mental health and psychiatric practice at a statistically significant level (r = 0.719, p-value < 0.001). Additionally, motivation and hygiene factors were found to have a moderate positive correlation with mental health and psychiatric practice (r = 0.693, p-value < 0.001 and r = 0.606, p-value < 0.001 respectively).

Personal attributes and motivation that affect mental health and psychiatric practice (Table 5)

Table 5 Results of Stepwise Multiple Regression of mental health and psychiatric practice of health personnel working in sub-district health promoting hospitals, Khon Kaen Province

Factors	B	Beta	t	p-value	R	R^2
Work itself	0.230	0.254	3.054	0.003	0.588	0.346
Work condition	0.312	0.376	5.728	<0.001	0.729	0.531
Responsibility	0.223	0.231	3.142	0.002	0.757	0.573
Achievement	0.206	0.197	2.631	0.010	0.774	0.599

Constant value = 0.009, F = 41.011, p-value < 0.001

The multiple linear regression analysis revealed four factors affecting mental health and psychiatric practice, which were eventually placed into the prediction model. The first factor chosen into the model was work itself (p-value = 0.003), followed by work condition (p-value < 0.001). The third factor was responsibility (p-value = 0.002), and the last was achievement (p-value = 0.001). On the other hand, personal attributes such as education and experience did not affect the practice. The multiple linear regression analysis was then performed in order to make the prediction model as follows:

$$Y = a+b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4$$

Y = 0.009 + (0.23)(work itself) + (0.312)(work condition) + (0.223)(responsibility) + (0.206)(achievement)

Together, these four factors were able to predict mental health and psychiatric practice at 59.9%.

The problems and suggestions derived from the questionnaire

The top five most difficult aspects were mental health instruction (51.28%), problem solution counseling (47.43%), stress screen testing (42.30%), mental health promoting exercises (34.61%), and income support

(34.61%). The samples revealed that the specific natures of the practices cause them to feel less confident. Lack of knowledge and supporting media were also reported. They also pointed out that the practice was a less important priority in their superiors' eyes and provided less career advancement. In addition, certain problems such as unclear working processes, ill-defined assignments, and an over workload were raised. To solve these problems, some solutions were suggested such as specific skills training, recognition and promotion for persons in charge, job analysis for proper workload, as well as clear and well-defined policies and media aids.

The findings from qualitative data

The findings from the in-depth interview also provided insights into motivation. The interviewees suggested that well planned and clear policies as well as a sufficient budget were required in order to achieve the goals of mental health and psychiatric practice in sub-district health promoting hospitals. Furthermore, they have suggested that mental health and psychiatric practice should be integrated into general health practices, as most patients visiting sub-district hospitals suffer from physical illnesses rather than mental illness. Additionally, in the sub-district health promoting hospital context, there was a service limitation in mental health and psychiatric practice according to its characteristics. Moreover, there should be a person in charge of the job with properly defined workloads. Positions, wages and incentive should be analyzed, as there is the possibility of being attacked by a mental patient. Lastly, the recognition by supervisors was considered necessary and important.

3.2 Discussion

Motivation level in mental health and psychiatric practice

The results showed that motivation level in mental health and psychiatric practice was high (3.5 1± 0.49). The findings were similar to a study of the motivation levels in administrative performance conducted by Puphapun (12), a study of the motivation levels of the participation in quality improvement by Srisawatphong (13), a study of the motivation levels in project management by Prommawai (14), a study of the motivation levels in proper governance management by Chukhanhom (15), a study of the motivation levels of official evaluation frame performance by Bunditsan (16), and a study of the motivation levels of health promotion performance by Donsomjit (17). The high levels of motivation within mental health and psychiatric practice may be explained as follows. First, mental health and psychiatry are special fields. The nature of this practice requires specific approach, which is different from physical healthcare. It generally requires long time care, commitment, and high responsibility. Therefore, the practice itself is challenging. When looking closely at the findings in other studies, high levels of motivation were also found in staff who are responsible for challenging tasks, for example, quality improvement, governance scheme, and health promotion. However, the findings from this study did not conform to the findings of studies done by Sarnchan (18) who found moderate motivation levels in the epidemiological practice, Assiri (19) who found moderate motivation levels in the performance of traditional Thai medicine, and Rawiyawong (20) who found moderate motivation levels in dental health performance. The differences in motivation levels here may be explained, as the persons in charge may have perceived that the tasks did not exactly belong to them, Thus, they lacked interest in the task and felt less motivated.

Personal attributes and motivation that relate to mental health and psychiatric practice

The finding revealed that education had a low indirect relationship with mental health and psychiatric

practice at a statistically significant level (r = 0.205, p-value = 0.030). This was similar to the findings from a study done by Langkulanon who found that education had an indirect relationship with risk management (21) and a study done by Thongchai who found a low indirect relationship with pharmaceutical practice (22). The indirect relationships found here might be explained as most health personnel with higher degree looked forward to the tasks more relevant to their educational field. Other personnel attribute which related to mental health and psychiatric practice was experience. It had a low direct relationship at a statistically significant level (r = 0.205, p-value = 0.028). This was similar to the finding from a study done by Srisawatphong (13) but different from the finding of a study done by Saminoy (23) who found there was no relationship between experience and the Performance of Epidemiological Surveillance. This might be explained as mental health and psychiatric practice required certain knowledge and skills. Thus, certain amount experience of working in this field was required. For other personnel attributes, the findings pointed that gender, age, position and training had no relationships with mental health and psychiatric practice at a significant level (p-value < 0.05).

The finding showed that motivation had a high direct relationship with mental health and psychiatric practice (r = 0.719, p-value < 0.001). The multiple linear regression analysis also revealed that four factors; work itself, work condition, responsibility and achievement, together, were able to predict mental health and psychiatric practice at 59.9%. This finding confirmed the importance of the nature of mental health and psychiatric practice which mentioned earlier in the findings from the in-depth interview. In addition, working environment, supporting tools and proper workload were considered as significant hygienic factors. Ability to organize owns work, task obligation, career growth and professional ability were found to be significantly motivation factors for mental health and psychiatric practice.

4. Conclusion

This study revealed that the motivation level in mental health and psychiatric was high (3.51±0.39) as same as the level of mental health and psychiatric practice (3.55±0.48). The finding also showed that education and experience had low relationship with mental health and psychiatric practice at a significant level (r = -0.202, p-value = 0.03 and r = 0.205, p-value = 0.028). In contrast, gender, age, position and training had no relationship with the practice. Stepwise regression analysis pointed that working itself, working conditions, responsibility and achievement were able to predict 59.9 percent of mental health and psychiatric practice at a statistically significant level (p-value < 0.05).

Suggestions

Although the findings from the quantitative data suggested no relationship between training and the mental health and psychiatric practice, the findings from the in-depth interview revealed a contrarily interesting point in this issue. It showed that persons in charge lacked the confidence and skills to complete some tasks. 51.28% of the sample stated that they had difficulty doing mental health instruction. Similarly, 47.43% of them had difficulty performing problem solution counseling. From this point of view, certain skill training were required. Additionally, periodical training should be provided to persons in charge. Based upon the findings of the prediction model, chiefs of sub-district health promoting hospitals should develop strategies through factors like working itself, working conditions, responsibility and achievement in order to increase motivation. Another research in the future should be done in a larger scale such as community hospitals. In addition, action research

should be done especially in term of providing skills training to those health personnel in charge of mental health and psychiatric.

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