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Effect of a Case Management Program for Older People with Diabetic Retinopathy

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ABSTRACT

Diabetic retinopathy is a common complication of Diabetes Mellitus (DM), leading to blindness and impacts on quality of life, including physical, mental, and socio-economic status among patients and their families. This one-group, quasi-experimental study was conducted to examine the effects of a case management program applying Orem's nursing system theory for older people with diabetic retinopathy. The subjects were 25 older persons with diabetic retinopathy diagnosis from a primary care unit in Nonthaburi Province. The experimental group participated in a 12-week case management program, which applied Orem's nursing system theory. The program consisted of health education, health assessment, a clinical pathway, individual counseling, a home visit, telephone follow up, with assessment of perceived self-care agency and self-care behavior. Hemoglobin A_1C (HbA_1C) levels, fasting plasma glucose (FPG) and blood pressure were assessed before and after the program.Each subject was interviewed by the researcher about general characteristics, perceived self-care agency and self-care behavior.Data were analyzed using paired t-test.

After the intervention, the mean scores of perceived self-care agency and self-care behavior of the older people with diabetic retinopathy were significantly higher than those before the experiment at a p-value of< 0.01. FPG was significantly lower than before the intervention at a p-value of < 0.01. However, there was no significant difference in Hemoglobin A_1C (HbA_1C) level or systolic blood pressure before and after the intervention. The results support the case management program since applying Orem's nursing system theory did improve perceived self-care agency, self-care behavior, and FPG among older people with diabetic retinopathy. This type of intervention should be adapted for use in primary care units to promote health outcomes among older people with other chronic diseases.

Keywords : Case management, Older people, Diabetic retinopathy, Perceived self-care agency, Self-care behavior

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Table 1 Comparison of mean scores of perceived self-care agency, self-care behavior, HbA_1C, FPG, systolic BP before and after intervention (n=25)

Variable	Before		After		t	p-value
	$\bar{x}$	SD	$\bar{x}$	SD		
perceived self-care agency	75.1	12.4	83.4	9.0	-5.5	<0.01
Self-care behavior	27.4	5.3	32.6	3.7	-7.8	<0.01
HbA_1C	7.8	2.1	7.6	1.8	1.2	0.20
FPG	164.7	73.6	120.1	25.3	3.1	<0.01
Systolic BP	141.7	19.5	138.2	20.2	0.6	0.50

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The Effect of a Self-Management and Social Support Program For New Cases with Type 2 Diabetes

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ABSTRACT

New cases of diabetic patients with poorly controlled blood sugar are at risk of severe complications and disability. Enhancing patient's self-management would be useful in controlling the disease and preventing complications and improving quality of life. This quasi- experimental research aimed to study the effectiveness of a self-management social support programs in new cases of type 2 diabetes who have uncontrolled blood sugar levels. Subjects were type 2 diabetic patients aged 30-65 years receiving diabetes clinic services at the outpatient department, U-Thong Hospital, Suphanburi. Subects were randomly selected and divided into an experimental group (n=30) and a comparison group (n=29). The study took a total of 9 weeks. The experimental group was provided with a self-management and social support program consisting of problem solving, decision making, perceived social support, resource utilization, a patient-health care provider partnership, taking action, self-tailoring, and a follow-up call and encouragement. Activities were arranged 3 times in 3-hour sessions each at the diabetes clinic, U-Thong Hospital according to the appointment system of the hospital. After the 3rd activity, 5 minute telephone follow-up calls were used by the researcher to encourage self-management behavior. Post-test was conducted at the 1st and 3rd weeks after the intervention. The comparison group received brochures about diabetes and routine health education by health care providers. Data were collected using questionnaires during the pre-post experiment and in the follow up stage with analysis using descriptive statistics, chi-square, repeated-measure ANOVA and independent t-test.

Results showed that after the intervention, the experimental group had significantly better mean scores of self-management behavior to control blood sugar levels, perceived social support from caregivers, and improved blood sugar levels (DTX) than at pre-experiment and than the comparison group (p-value <0.05)

It is suggested that self-management and social support programs may be beneficial for new cases of type 2 diabetes to enhance self-management skills to better control blood sugar levels.

Keywords: new cases / type 2 diabetes / self-management / social support

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Table 1: Comparison of mean scores in variables of the experimental group and comparisons group during pre-experiment, post-experiment, and follow-up

Variables	Experimental group (n=30)			Comparisons group (n=29)		
	Mean difference	Std. Error	p-value	Mean difference	Std. Error	p-value
Behavioral self-management to control blood sugar levels						
pre-experiment post-experiment	-7.13	1.23	<.001*	-2.48	1.32	0.214
pre-experiment follow-up	-9.47	1.81	<.001*	-2.07	1.50	0.539
post-experiment follow-up	-2.33	1.34	0.275	0.41	1.07	1.000
	F=22.2, df=1.6, p-value =<.001			F=2.1, df=2, p-value =0.137		
Perceived social support from caregiver						
pre-experiment post-experiment	-8.77	1.24	<.001*	-4.83	0.98	<.001*
pre-experiment follow-up	-10.17	1.63	<.001*	-5.59	1.19	<.001*
post-experiment follow-up	-1.40	1.15	0.704	-0.76	1.29	1.000
	F=33.0, df=1.7, p-value =<.001			F=13.7, df=2, p-value =0.000		
Blood sugar level (DTX)	41.03	8.16		3.62	8.54	1.000
pre-experiment post-experiment	52.53	10.39	<.001*	37.48	8.45	<.001*
pre-experiment follow-up	11.50	9.88	<.001*	33.86	8.08	0.001*
post-experiment follow-up	F=16.8, df=2, p-value =<.001		0.761	F=12.2, df=2, p-value =<.001		

*p-value<0.05

Table 2: Comparison of mean scores behavioral self-management to control blood sugar levels, perceived social support from caregiver, blood sugar level (DTX) between the experimental group and comparison group before experiment, after the experiment, and the follow-up period

Variables	Experimental group (n=30)		Comparisons group (n=29)		t	df	p-value
	$\bar{x}$	S.D.	$\bar{x}$	S.D.			
Behavioral self-management to control blood sugar levels							
pre-experiment	47.90	7.02	48.34	5.69	-0.267	57	0.791
post-experiment	55.03	5.22	50.83	5.34	3.059	57	0.003*
follow-up	57.37	5.25	50.41	6.12	4.692	57	0.000*
	F=13.03, df=1, p-value=<.001						
Perceived social support from caregiver							
pre-experiment	55.23	6.28	54.34	4.54	0.624	52.8	0.535
post-experiment	64.00	3.68	59.17	4.62	4.431	53.4	0.000*
follow-up	65.40	5.44	59.93	5.68	3.780	57	0.000*
	F=19.73, df=1, p-value=<.001						
Blood sugar level (DTX)							
pre-experiment	189.03	52.50	195.97	40.69	-0.566	57	0.574
post-experiment	148.00	50.23	192.34	35.14	-3.917	57	0.000*
follow-up	136.50	30.53	158.48	34.81	-2.581	57	0.012*
	F=9.44, df=1, p-value=0.003						

*p-value<0.05

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Factors Related to Spiritual Well-Being among Caregivers of Schizophrenic Patients

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ABSTRACT

Schizophrenia is a chronic illness that requires continuous care. Caregivers need to take care of and interact with these patients. Caregivers need the power to support their own lives and well-being, especially their spiritual well-being. The purpose of this descriptive correlational research was to study the relationship of factors including age, faithfulness to religious practice, burden, social support, and knowledge of caring for patients with schizophrenia with spiritual well-being among caregivers of patients with schizophrenia. A purposive sampling was used to select the caregivers of schizophrenic patients from one particular psychiatric hospital (n = 100). Data collection was conducted from personal information records, and five self-reported questionnaires including one on spiritual well-being, faithfulness to religious practice, burden, social support, and knowledge of caring for patients with schizophrenia. The reliability coefficients of these five questionnaires were, .83, .91, .90, .85, and .71 respectively. Descriptive statistics and Pearson product-moment correlation coefficient were employed in data analysis.

Results revealed that the average score of total spiritual well-being was at a moderate level. Spiritual well-being was significantly correlated with faithfulness to religious practice, social support, and age at p-values < .01 and .05 (r = .636, .448 and .200 respectively).The knowledge of caring for patients with schizophrenia and burden were not significantly correlated with spiritual well-being among these caregivers.

Health professionals may apply these results to serve as baseline data for the development of interventions aimed at enhancing spiritual well-being among caregivers through promoting caregivers' faithfulness to religious practice and social support.

Key words: spiritual well-being, caregivers, schizophrenic patients

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Table 1 Average, standard deviation of age, faithfulness to religion practice, burden, social support, and knowledge of caring for patients with schizophrenia and Spiritual well-being among caregivers of schizophrenia patients

Variable	Average	Standard deviation	Level
1. Age	49.53	12.67	Middle-aged
2. Faithfulness to religion practice	26.73	2.93	High
3. Burden	34.49	9.71	Not a burden
4. Social support	140.59	18.70	High
5. Knowledge of caring for patients with	11.60	1.67	High
6. Spiritual well-being	94.23	12.21	Moderate

Table 2 Correlation coefficient between age, faithfulness to religion practice, burden, social support, and knowledge of caring for patients with schizophrenia with spiritual well-being among caregivers of patients with Schizophrenia

Variable	Correlation coefficient (r)	level of relationship
1. Age	.200*	Low relationship
2. Faithfulness to religion practice	.636**	Moderate
3. Burden	-.082	No relationship
4. Social support	.448**	Moderate
5. Knowledge of caring for patients with	.086	No relationship

* $p < .05$, ** $p < .01$

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Factors Influencing Depression among Adolescents in Extended Opportunity Schools

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Abstract

Depression found among adolescents is associated with multiple factors. The purposes of this study were to examine depression and factors influencing it among adolescents in extended opportunity schools. Subjects consisted of 289 students from extended opportunity schools located in Bangpli district, Samutprakran province. Research instruments included self-reported questionnaire to gather data regarding students' demographic characteristics, depression measures in a children' s depression inventory through a depression evaluation form, assessment of negative automatic thought using a negative automatic thought evaluation form, negative event experience using a negative events scale and evaluation form, the Personal Resource Questionnaire to evaluate social support (PRQ85: Part 2, measures of problem solving using the problem solving behaviors evaluation form and emotional problem-solving using an emotional problem-solving behaviors evaluation form. These scales yielded Cronbach's alpha coefficients of .85, .93, .96, .96, .90 and .81, respectively. The data were analyzed using descriptive statistics and stepwise multiple regression.

The findings revealed that negative automatic thought, negative life events, and emotion-focused problem-solving behaviors positively correlated with depression at a level of significance of .01 (r = .390, .178, and .226, respectively).Factors that could significantly predict depression among these students were negative automatic thought (β = .363, p <.01) and emotion-focused problem-solving behaviors (β= .165, p <.05). These two predictors accounted for 17.9% of the variance for depression (R^2 = .179, p < .05)

Results suggest that those who are involved in caring for students from extended opportunity schools might develop activities or programs aimed at modifying negative automatic thoughts and promoting proper problem-solving behaviors in order to prevent and reduce depression among students.

Keywords : Depression /Students /Extended opportunity Schools

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Table1 : Analysis Number, percentages and level of depression in adolescents in extended Schools at Bangpli, Samutprakran (n = 289)

Level of Depression	Total (n = 289) Number (%)	Male (n = 111) Number(%)	Female (n = 178) Number(%)
Not depressed	206(71.30)	90(81.08)	116(65.17)
Depressed	83(28.70)	21(18.92)	62(34.83)
Mild to moderate depressed	48(16.60)	13(11.71)	35(19.66)
Severe depressed	35(12.10)	8 (7.21)	27(15.17)
(Mean= 11.41, SD = 7.4)			

Table 2 : Pearson's correlation coefficient among student achievement , negative automatic thought, negative life events, social support, problem-focused solving behaviors and emotional-focused solving behaviors.

Variables	1	2	3	4	5	6	7
1. Achievement	1						
2.Negative automatic thought	.080	1					
3.Negative life events	.030	.587**	1				
4. Social support	.146*	-.210**	-.204**	1			
5. Problem-focused solving behaviors	.142*	.045	.061	.197**	1		
6.Emotional-focused behaviors	.145*	.169**	.237**	.197**	.740**	1	
7. Depression	.027	.390**	.178**	-.053	.112	.226**	1

* p< .05; ** p < .001

Table 3: Stepwise multiple logistic regression model for factors predicting depressing among Adolescents in Extended opportunity schools in Bangpli, Samutprakran.

Variables	*b*	*SE*	β	*t*	*p-value*
constant	-1.830	1.847	-	-.991	< .001
Negative automatic thought	.169	.025	.363	6.660	< .001
Emotional-focused solving behaviors	.169	.056	.165	3.032	< .001

R^2 = .179 ; Adjust R^2= ,173 ;R=.422 ;F = 1,286 ; p < .001

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Factors Associated with Safety Behavior among Vocational Students in the Vocational Program at Chitralada Vocational School

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ABSTRACT

Adolescent and younger workers are at greater risk of workplace injury and accident than older workers. Students in vocational school, being prepared for work in the industry and technology sectors are also more likely to be injured on the job or when working in a workshop at school. The objective of this study was to examine factors associated with safety behaviors among vocational school students in Bangkok. The study subjects were 378 vocational certificate, grade 1-3 students in a vocational school in Bangkok. Data were collected using self-administered questionnaire and assessed descriptively by mean and standard deviation. The relationship between personal factors, antecedent factors (School safety environment), determinant factors (Safety knowledge and Motivation) and safety behaviors were examined using Chi-Square test, Pearson's product moment correlation coefficient, and multiple regression analysis.

Results showed that the overall safety behaviors in vocational students was at a high level (Mean = 4.11, S.D. = .49), the perception of a safety environment at school was at a high level (Mean = 2.52, S.D. = .33), safety motivation was at the highest level (Mean = 4.31, S.D. = .51) and safety knowledge was at a high level (Mean = 12.37, S.D. = 3.15) Multiple regression analysis showed that safety motivation, school safety environment, safety knowledge, grade, and sex could explain 35% of safety behavior of vocational students by 35% with safety motivation the best predictor of safety behavior, followed by safety environment and safety knowledge the least predictor.

The findings suggest that vocational schools should provide a climate of safety, encourage safety motivation and include occupational health and safety education in the curriculum in order to develop thoughts and behaviors of safety.

Keywords : Vocational Student/ Safety Behavior/ Safety Climate/ Motivation/ Knowledge

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Table1. Comparison of mean scores on safety behavior by demographic variables (n=354)

Demographics	ค่าเฉลี่ย ($\bar{x}$)	SD	t (F)	df	p-value
Sex					
Male	99.13	12.92	10.228	352	.002*
Female	103.82	11.69			
Age					
15	103.15	11.70	1.461	349	.214
16	104.30	12.16			
17	100.71	12.09			
18	101.66	11.929			
19	105.50	18.39			
Grade/Year					
Vocational cert.1	104.31	11.92	3.969	351	.020*
Vocational cert.2	99.69	13.49			
Vocational cert.3	102.71	11.14			
Major					
Electrical power	106.59	13.03	3.815	347	.001*
Electronics	103.17	7.62			
Auto mechanics	100.94	9.89			
Mechanic tech	108.89	10.79			
Food and Nutrition	100.11	13.18			
Business computer	102.25	13.30			
Marketing	99.11	13.34			
Safety training experience					
Ever	102.54	11.51	0.020	352	.888
Never	102.73	12.91			
Previous injury/accident					
Ever	100.62	10.97	3.272	352	.071
Never	103.31	12.49			

*p – value < 0.05

Table2. Correlation matrix between age, grade point average (GPA), perception of safety climate, safety knowledge, safety motivation and safety behavior among vocational students

Variables	1	2	3	4	5	6
1. Age		.164**	.078	-.012	-.041	-.068
2. GPA			-.009	.209**	.130*	-.037
3. Safety climate				.305**	.251**	.307**
4. Safety knowledge					.427**	.336**
5. Safety motivation						.546**
6. Safety behavior						

**p – value <0.001

Table3. Stepwise multiple linear regression analysis of factors influencing safety behavior among vocational students.

ตัวแปร	**R^2 change**	**Beta**	**t**	**p- value**
Safety motivation	0.291	0.749	8.951	<0.001
Safety climate	0.035	0.317	3.738	<0.001
Grade/Year	0.015	3.395	3.169	0.002
Sex	0.008	2.531	2.072	0.039
Safety knowledge	0.007	0.376	2.000	0.046

Constant = 31.17, R^2 = 0.357, Adjusted R^2 = 0.347

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Relationship of the Readiness of Community Health Nursing Practice and Mental Health of Second Year Nursing Students, Kasem Bundit University.

Siriluk Suesat*

ABSTRACT

Community health nursing practice is a proactive practice. Thus, it affects nursing students' mental health during their practice. This descriptive study aimed to examine the relationship of readiness of community health nursing practice to the mental health of nursing students. Subjects were second year nursing students (n=56), Kasem Bundit University. The data were collected from 17-21 April 2017. Instruments in this study consisted of 2 parts ; 1) Mental health screening (Thai Mental Health Indicator-15/TMHI-15) and 2) Readiness of community health nursing practice questionnaires which included: 2.1) Self-directed learning readiness using the Self-Directed Learning Readiness Scale (SDLRS), and 2.2) Teamwork nursing practice skills. Data were analyzed, using Pearson's correlation.

Results revealed that the mental health of nursing students were 51.79% in higher than general person level and 42.86% in equal general person, the readiness of community health nursing practice for teamwork of nursing students was 76.79% in high level, and the readiness of community health nursing practice for self-directed learning of nursing students was 71.43% in moderate level. The readiness of community public health nursing practice was significantly related to mental health indicators ($r=.376$, $p< .01$). Readiness of community public health nursing practice is significantly related to self-directed learning and teamwork for positive mental health ($r=.387$ and $r= .395$, $p<.01$). So, the method of teaching in community health nursing should be developed to enhance self-directed learning and teamwork as a function of 21st century learning by nursing instructors. Further research to develop a model of readiness of community health nursing practice is recommend in order to promote nursing students' mental health during their community practicum.

Keyword: Readiness, Community health nursing practice / Mental-health

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Table 1 Mental health of nursing students (n=56)

Scores of mental health	Number	%
Lower than general person (< 44 Scores)	3	5.35
Equal to general person (44-50 Scores)	24	42.86
Higher than general person (51-60 Scores)	29	51.79
Mean	**50± 4.88 (27-60)**	

Table 2 Readiness of community nursing practice of nursing students (n=56)

Scores of readiness	Mean	S.D.	Number	%
Readiness of community nursing practice	**222**	**25.02**		
- Self-Directed Learning Readiness	**153**	**17.40**		
Low level (40-133 Scores)			6	10.71
Moderate level (134-166 Scores)			40	71.43
High level (167-200 Scores)			10	17.86
• **Self – management**	**49**	**5.87**		
• **Desire for learning**	**48**	**6.25**		
• **Self-control**	**57**	**6.99**		
- Teamwork	**69**	**8.88**		
Low level (< 40 Scores)			-	-
Moderate level (40-62 Scores)			13	23.21
High level (63-85 Scores)			43	76.79

Table 3 Correlation between mental health and community health nursing practice of nursing students

Variables	Pearson's correlation (r)
Readiness of community nursing practice	.376**
- **Self-Directed Learning Readiness**	. 339*
• Self - management	.243
• Desire for learning	.387**
• Self-control	.294*
- **Teamwork**	.395**

* p<.05 and **p<.01

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Life Assets and Factors Related to Early Smoking Stage among Male Upper Primary School Students, Kalasin Province

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ABSTRACT

Smoking, especially among adolescents, is an important problem in Thai society since prevalence is increasing and age of initiation is decreasing. This study is correlational research. The purposes of this study were to identify the prevalence of smoking at an early stage of life, life assets, and factors related to early smoking among male upper primary school students. Participants were 390 male elementary students in Kalasin province. They were randomly selected using cluster random sampling.

Questionnaires collected demographic data, environmental data, and attitudes toward smoking, smoking refusal self-efficacy, life assets, and smoking overall. Statistics used included mean, percentage, standard deviation, and binary logistic regression which were used in data analysis. Findings showed an early smoking stage prevalence of 43.0%. Life assets included 5 powers; power of self, power of family, power of wisdom, power of peer and activity, and power of community. Participants overall life assets were at a good level (73.5%). Among the 5 powers, power of family and power of self were at a very good level (84.5% and 83.3% respectively); power of peer and activity was at a good level (72.5%); power of community was at a moderate level (68.9%); and power of wisdom did not meet even a basic level. Significant factors related to early smoking stage among male upper primary school students were that close friends smoked (AOR = 3.37, 95% CI = 1.09-10.44), cigarette accessibility (AOR = 2.86, 95% CI = 1.75-4.68), attitudes toward smoking (AOR = 2.75, 95% CI = 1.09-6.95), smoking refusal self-efficacy (AOR = 2.47, 95% CI = 1.52-4.00), power of family (AOR = 1.94, 95% CI = 1.18-3.18), power of peer and activity (AOR = 1.42, 95% CI = 1.17-1.74), power of self (AOR = 1.24, 95% CI = 1.04-1.48), and power of community (AOR = 1.15, 95% CI = 1.03-1.30). Results should be beneficial to nurses and other health personnel who are involved in the prevention and reduction of smoking initiation among male adolescents.

Key words: Early smoking stage/ Life assets/ Upper primary school students

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Table 1 Number Percentage and Adjusted odds ratio classified factors and early smoking (n=390)

Factors related to early smoking stage	Non smoking (n = 219)		Early smoking stage (n = 171)		Adjusted OR	95% CI
	Number	Percentage	Number	Percentage		
Power of self						
High(R) (≥ 70%)	116	61.7	72	38.3		
Low (< 70%)	103	51.0	99	49.0	1.24*	1.04-1.48
Power of family						
High(R) (≥ 70%)	98	62.4	59	37.6		1.18-2.41
Low (< 70%)	121	51.3	112	48.7	1.94*	
Power of wisdom						
High(R) (≥ 70%)	111	56.9	84	43.1	1.42	0.83-2.41
Low (< 70%)	108	55.4	87	44.6		
Power of community						
High(R) (≥ 70%)	119	61.7	74	38.3		
Low (< 70%)	100	50.8	97	49.2	1.42**	1.17-1.74
Attitude toward smoking						
Disagree(R)(≥ 37 คะแนน)	117	53.4	51	29.8		
Agree (< 37 คะแนน)	102	46.6	120	70.2	1.42**	0.83-2.41
Power of community						
High(R) (≥ 70%)	119	61.7	74	38.3		
Low (< 70%)	100	50.8	97	49.2	1.42**	0.83-2.41
Smoking refusal self-efficacy						
High(R) (≥ 13 คะแนน)	164	61.2	104	38.8		
Low (< 13 คะแนน)	55	45.1	67	54.9	2.47***	1.52-4.00
Cigarette accessibility	15	75.0	5	25.0		
Difficult(R)	204	55.1	166	44.9	2.86***	1.75-4.68
Easy						
Closed people smoking	101	71.1	41	28.9		
No(R)	118	47.6	130	52.4	3.37***	1.09-10.44
Yes						

*p < 0.05 **p < 0.01 ***p < 0.001 (R) Reference group

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Alcohol drinking behavior among undergraduate students in Phayao Province

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ABSTRACT

Alcohol drinking by youth in Phayao Province has reached the highest level in Thailand. This descriptive study used a survey instrument based on the PRECEDE model as a framework to investigate the alcohol drinking behavior of undergraduate students in Muang district, Phayao Province. The sample were 468 undergraduate students and 3 administrator of educational institution. Stratified random sampling was used to recruit the sample. Data were collected using questionnaire and semi-structured Interview protocol. Descriptive statistic and content analysis were used to analyze data.

The results revealed that most participants had knowledge and attitudes toward the negative effects of alcohol drinking at high level (88.0 %, 50.94% respectively). About half of participants had incentive to drink alcohol (55.55) and negative consequence of drinking (52.95). Regarding prevalence of liquor stores, there were 15 stores within 500 meters and 33 stores within 1,000 meters of educational institutions. According to the policy, the educational institutions' administrators reported that there was no alcohol drinking at the institution. In addition, punishment would be applied for aggression and bullying behaviors resulting from alcohol drinking. Moreover, the educational institutions also cooperated with the public sectors to monitor stores and entertainment venue to compliance with laws. Nevertheless, most undergraduate students (83.8%) reported drinking alcohol within the last six months; and 34% of students drank four times a week. The main rational for alcohol consumption was for social gatherings (43.5%). Most students (88.7%) drank with friends. Each student spent about 100-300 baht for alcohol drinking on each occasion. The majority of students (72.8%) drank alcohol in the evening; and 55.7 % of the students bought alcohol beverages from convenience stores. Negative consequences included being unable to wake up for study or always being late to study (24.1%), and being bullied (22.3%).

It is suggested that legislation on the sale of alcohol beverages to students should be regulated. The educational campaign about the negative impacts of long-term alcohol consumption should be promoted.

Keywords: Alcohol drinking behavior, undergraduate student, Phayao Province

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Table 1 Percentage of Alcohol drinking behaviors among undergraduate students

Alcohol drinking behaviors	percentage	S.D.
Drinking alcohol within the last six months	83.8	.38
Drinking with friend	88.7	.42
The first time drinking at the age of 15	25.7	3.38
Drinking alcohol in the evening (5.00pm.-11.59pm.)	72.8	.53
Buying alcoholic beverages from the convenience stores	55.7	1.14
The rational for alcohol consumption was social gathering	43.5	2.22

Table 2 Relationship between Predisposing, Reinforcing factors and alcohol drinking behavior among undergraduate students

Factors	Chi-square (χ^2)	p-value
Predisposing factors		
Knowledge about alcohol	2.025	.155
Attitude toward alcohol	4.634	.031
effect of drinking alcohol	71.130	<.001*
Reinforcing factors		
motivation to drinking alcohol	51.615	<.001*

*** p-value <0.001**

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The Effects of Teacher Development Program for Child Development among Preschool Children In Child Care Centers

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ABSTRACT

Preschool children had been raised by caregivers teacher in child care center. This quasi-experimental research is designed to study the effect of child care teacher developmental program for promoting child development among preschool children in child care center. The subjects of the study comprised of child care teachers of children in child care centers of the local government district of Nakhonratchasima province, 60 people had been sampling by simple random sampling method and assigned into an experimental group and a comparison group each 30 people. Duration of the study is 7 weeks. The experimental group was assigned three activities plans of teacher development program by applying self efficacy theory. The research procedure last 2 weeks, follow by child care centers visiting and follow-up the forth week after intervention. The activities of increasing knowledge using lecture and group discussions including, vicarious experience. Data were collected by self-administered question on personal characteristics, knowledge, self-efficacy and behavioral preschool children development capacity among teachers in child care center. Data were analyzed by using descriptive analysis, repeated Measures one way ANOVA and Independent t-test, with p-value at 0.05.

The study results revealed that after experiment and follow-up, the experimental group showed significantly higher scores of knowledge and self-efficacy in promoting the development of preschool children than prior to experimentation and higher than those of the comparison group (p-value <.001). The behavioral development of preschool children teachers in child care center were higher than those of the comparison group (p-value <.001) but there was no significant difference within group.

In conclusion, The effects of teacher development program could develop knowledge, self-efficacy of the development of preschool children teachers in child care center. Public health nurse can be used this program to guide giving educator or supervision and monitoring for promoting child development among preschool children.

Keyword: Promoting child development among preschool children/ Child care teacher/ Child care center

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Table 1 Comparison of mean scores in knowledge of encouraging preschool child development, perception of self-efficacy of encouraging preschool child development, and behavior of encouraging preschool child development in pre-experiment, post-experiment and follow-up stage.

Variables	Mean	SD	p – value
The knowledge of encouraging preschool child development			
Experimental group			
Pre – Post experiment	2.967	0.338	< 0.001
Pre-experiment – Follow up	3.167	0.381	< 0.001
Post-experiment - Follow up	0.200	0.391	1.000
Comparison group			
Pre – Post experiment	1.643	0.564	0.021
Pre-experiment – Follow up	1.071	0.582	0.230
Post-experiment - Follow up	-0.571	0.450	0.644
The perception of self-efficacy in encouraging preschool child development			
Experimental group			
Pre – Post experiment	6.067	1.177	< 0.001
Pre-experiment – Follow up	8.267	1.436	< 0.001
Post-experiment - Follow up	2.200	1.214	0.241
Comparison group			
Pre – Post experiment	-0.867	1.243	1.000
Pre-experiment – Follow up	-0.300	1.191	1.000
Post-experiment - Follow up	0.567	0.926	1.000
The behavior in encouraging preschool child development			
Experimental group			
Pre – Post experiment	5.800	2.256	0.047
Pre experiment – Follow up	6.433	2.087	0.013
Post experiment - Follow up	0.633	1.029	1.000

Table 1 Comparison of mean scores in knowledge of encouraging preschool child development, perception of self-efficacy of encouraging preschool child development, and behavior of encouraging preschool child development in pre-experiment, post-experiment and follow-up stage. (cont.)

Variables	Mean	SD	p – value
Comparison group			
Pre – Post experiment	-1.833	2.085	1.000
Pre experiment – Follow up	-0.700	2.213	1.000
Post experiment - Follow up	1.133	1.653	1.000

Table 2 Comparison among mean in knowledge of encouraging preschool child development, perception of self-efficacy of encouraging preschool child development, and behavior of encouraging preschool child development in pre-experiment, post-experiment and follow-up stage and in between experimental group and comparison group.

Variables	Experimental group (n=-30)		Comparison group (n=-30)		t-test	df	p-value
	Mean	SD	Mean	SD			
The knowledge of encouraging preschool child development							
pre-experiment	9.30	1.860	9.10	2.107	0.390	58	0.698
post-experiment	12.27	1.388	10.87	1.306	4.024	58	< 0.001
follow-up	12.47	1.432	10.21	2.132	4.752	56	< 0.001
The perception of self-efficacy in encouraging preschool child development							
pre-experiment	62.93	5.836	65.37	6.435	-1.534	58	0.130
post-experiment	69.00	3.572	64.50	3.749	4.760	58	< 0.001
follow-up	71.20	5.616	65.07	4.510	4.664	58	< 0.001
The behavior in encouraging preschool child development							
pre-experiment	63.67	11.763	63.40	9.825	0.095	58	0.924
post-experiment	69.47	4.592	61.57	4.666	6.610	58	<0.001
follow-up	70.10	2.771	62.70	6.808	5.514	58	<0.001

* p – value < 0.01

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Lessons learned from a community-based health project

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Abstract

The concept of a district health system was translated into action by a community health project (CHP) through collaborative of all sectors in a district. This CHP was in the initiation phase, therefore performing an evaluation of lessons learned was crucial. The aims of this study were: 1) to explore the processes of implementing a CHP of Phompiram district health system, Phitsanulok province during 1 January to 31 Decemeber, 2015, and 2) to identify success, barriers and recommendations for implementing CHP. Key informants included: 1) community participants, 2) the local organizational sector, and 3) the healthcare sector who were invited to participate in this project by purposive sampling, with a totally of 42 participants. Data were collected by semi-structured interview questionnaire. Data was analyzed by content analysis.

Results showed that the CHP was initiated from the Ministry of Public Health's policy. The project was made actionable by the change agent who was the key person in translating the policy into practice. The change agent was communicating both informal and formal communications among stakeholders in community, identifying social capital, assessing health needs, designing methods and activities, and establishing an evaluation intervention cover process and outcome indicators. Successful factors regarding the process of health promotion planning in improving health by community based approach were leadership, communication of the district health team, social capital and engaging participants in roles of the district health system. Barriers included the ambiguous roles of inter-collaborations among sectors and time constraints. A recommendation was to provide forum meetings to monitor task continuity.

The contributions of this CHP identify community assets, assess local health needs, and use community data to solve community health problems. This CHP is a participative approach rather than a traditional approach which emphasis on health problem that involves only in health sector.

Key words: Lessons learned, Community-based health project, Social capital, Health needs assessment

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Table 1 Social capital in Phompiram district: Information from stakeholders

Type of social capital	Name and organization	Supporting activities of social capital in community
Human capital	- Monk	- Vocational training for caregiver - Monk act as a team member in providing home visit regarding mental support
	- Community club such as elderly club, village health volunteer club, local organization sector, chief of community, healthcare provider	- Collaborative in community forum meetings, all stakeholder would like to see every aging person received the appropriate caring and their relatives did not leave them home alone - All stakeholders share their responsibility and mutually support
Financial capital	- Temple - Local organization	- Financial support - Local organization support in building a new house and proving one-baht saving fund for the villager. Local organization invited the banker to train the villager to do account book
Physical capital	- Elderly club	- The elderly set the activities in elderly club
	- Convenient transportation	- Local organization provide the driver to transfer the elderly in participating the elderly club
Cultural capital	- Population	- Training the villager to be the caregiver - Share value of the villager are “Gratitude to the elderly” (3-Men-58; 4-Men-48) and “If we caring the elderly, we will not abandon in the future” (5-Female-52;7-Female-66; 8-Female-39)

Table 2 Activities for caring the elderly

Activity	Role	Stakeholder
1. Training caregiver in caring the elderly and homebound	- Assessment health need of the elderly and homebound in the community and training the caregiver	- Healthcare provider - People sector
2. Providing financial, equipment and safety housing	- Support the budget for caregiver, manage the equipment for to help people with disabilities, and support safety environment	- Local organization
3. Supporting economics and mental for relatives	- Vocational training - Visiting elderly and homebound with healthcare provider	- Monk
4. Home visit	- Design the home visit record form in improving information continuity - Record and Monitor symptom of the patient - Home visit - Role clarification of family care team at district, sub-district, and community level to work together	- Healthcare provider - Family care team at district, sub-district, and community level

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Improving efficiency of operating rooms utilization during official hours in Chonburi hospital

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ABSTRACT

Efficiency of the using operating rooms in tertiary hospitals has not been passed the standard criteria of 75%. This study aimed to improve the efficiency of the utilization of operating rooms to be more effective by using the concept of Deming cycle. Thirty-five participants were from multidisciplinary including nursing and related fields working in the 14 operating rooms from April to June. Participatory workshops were implemented within a month. Tools were 1. record forms: starting time on the operating first patient of each day, spending time in the operating room, waiting time of a new surgery patient from a previous surgery patient, and cancellation/postponing surgery and 2. program enhancements of the Deming cycle consists of Plan, Do, Check and Act. The data were analyzed by using percentage, mean, and standard deviation. Paired t –test was used to compare the efficiency of the program implementation.

Results showed that after implementation the efficiency of operating room utilization was greater significantly ($p<.05$), in which before and after implementation the percentage of the room utilization were 63.31 and 73.29, respectively. Also, the number of minor operating theaters passing the standard criteria at 75 percent increased from 7.14% to 42.86% after training implementation. In addition, the waiting time from a new patient from a previous patient decreased significantly ($p<.05$). However, the starting time of the first case of the day during 8:00-9:00 am. was not different. Similar to the overall cancellation/postponing rate of operation slightly decreased from 12.37% to 11.31% before and after training implementation, respectively. The causes were mainly from surgeons who cannot do surgery on time because of the severity of the disease and their difference complication, the patients and their relatives are not well prepared and error from administrative system such as wrong patient appointments and types of government health cards.

Here this study indicates the benefit of operating staff development based on a job improvement program of the Deming concept to increase the efficiency of development in the operation of patient surgeries in the future.

Keyword: Deming's cycle, Operating rooms, Utilization

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Table 1 Average of operating services and efficiency of patient operation in 14 operating theaters before and after training implementation.

Operating theater	Time used in operation of each theater (days/month)		Number of operated patients		Mean of patients per day		Mean of nursing time for each patient (hour)		Efficiency of room usage (%)	
	Before	After	Before	After	Before	After	Before	After	Before	After
Room 1	19	20	70	74	3.68	3.70	1:48	1:46	83.63	82.17
Room 2	13	14	24	37	1.85	2.64	2:26	1:56	56.19	63.78
Room 3	20	20	67	74	3.35	3.70	1:28	1:37	61.76	74.80
Room 4	18	20	42	60	2.33	3.00	1:43	1:39	49.86	64.31
Room 5	20	20	121	122	6.05	6.10	0:50	1:09	63.60	87.53
Room 6	20	20	72	71	3.60	3.55	1:38	1:50	73.86	84.46
Room 7	20	20	59	69	2.95	3.45	1:47	1:48	65.72	77.76
Room 8	15	14	18	16	1.20	1.14	4:26	4:40	66.46	66.68
Room 9	11	15	106	140	9.64	9.33	0:26	0:29	51.88	56.57
Room 10	15	16	133	162	8.87	10.13	0:28	0:36	52.10	78.00
Room 11	20	20	55	74	2.75	3.70	1:46	1:35	60.94	73.18
Room 12	17	15	70	66	4.12	4.40	1:15	1:19	64.78	72.92
Room 13	8	11	26	31	3.25	2.82	1:37	1:55	66.33	67.92
Room 14	20	20	56	76	2.80	3.80	1:58	1:58	69.16	76.11
Average	16.86	17.50	65.64	76.57	4.03	4.39	101.14	104.07	63.31	73.29

Table 2 Percentage of cancellation and postponing of operation of patients

cancellation and postponing of operation	**Before Implementation (n=1,432)**	**After Implementation (n=1,758)**
Overall	12.37	11.31
• Surgeons/physicians	57.05	70.31
• Patients and their relatives	32.19	23.15
• Administrative system and others	10.76	6.54

Table 3 Efficiency of utilization room operating, waiting time of one to another patient, and delay of starting time of the first case before and after training implementation.

Types of efficiency	Operating	Mean	SE	*t* test	df	*p-value*
-Utilization of operating room	Before	63.31	2.44	4.567	13	0.001
	After	73.29	2.25			
-Waiting time from one to another patient	Before	56.12	5.94	2.610	13	0.022
	After	66.38	5.65			
-Delay of starting time of the first case*	Before	50.63	5.10	.145	13	0.887
	After	51.24	4.90			

SE= standard error of mean; df= degree of freedom * Starting time at 8.00 am

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Effectiveness of an Intervention to Reduce Pesticide Exposure among Rice Farmers in Nakhon Ratchasima Province: Applying Social Learning Theory

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ABSTRACT

This quasi-experimental research with a two-group pre-posttest design examined the effectiveness of an intervention to reduce pesticide exposure among rice farmers. The experimental and control groups consisted of 46 farmers per group in Nakhon Ratchasima Province. The experimental group was invited to join the intervention to reduce pesticide exposure through a program based on Social Learning Theory, while the control group attended a health education program of similar length. The intervention program to reduce pesticide exposure consisted of trainings, showing a good model of pesticide use, practice using personal protective equipment, group discussion and sharing, and home visits for 4 weeks. Instruments for data collection were knowledge, self-efficacy, outcome expectation and pesticide prevention behaviors assessed by questionnaire. The data were reported by mean and standard deviation, and analyzed using repeated-measure analysis of variance.

The results revealed that the mean scores of knowledge, self-efficacy, outcome expectation and pesticide prevention behaviors before, after and at follow-up were significantly different ($p<.05$). Analytical methods also showed that self-efficacy, outcome expectation and pesticide prevention behaviors after the intervention and at follow-up were significantly different ($p<.05$).

These results show that this intervention to reduce pesticide exposure promoted safety and preventive behaviors resulting in reduced exposures by rice farmers.

Key words: Rice farmers/Social Learning Theory/Pesticide Exposure/Thailand

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Table 1 Demographic and pesticide use related characteristics by intervention status

Demographic Data	Intervention group (n=46)		Control group (n=46)	
	number	%	number	%
Male	22	47.8	21	45.7
Age (years) (Mean ±Standard Deviation)	48.5±10.5		49.5 ± 12.3	
Married	46	100.0	43	93.5
Highest Education at Primary School	22	47.9	26	56.5
Diseases	6	13.0	10	21.7
Income not enough and debt*	40	87.0	24	52.2
Exposure to pesticide by spraying*	20	43.5	9	19.6
Exposure to pesticide by mixing	10	21.7	6	13.0
Exposure to pesticide by spraying & mixing	7	15.2	5	10.9
Using Personal Protective Equipment (PPE)	11	23.9	17	36.9
No experience of pesticide poisoning symptoms	23	50.0	25	54.3

***p-value <0.05**

Table 2 Comparing mean scores of knowledge, self-efficacy, outcome expectations and preventive behaviors on pesticide intoxication prevention between before, after and follow-up stage within intervention group (n =46)

Variables	$\bar{x}$	S.D.	F	Pairwise comparison		
				Before	After	Follow-up
Knowledge			29.44**			
Before	8.30	1.58		-	-0.674**	-0.652**
After	9.46	1.19			-	0.022
Follow-up	9.70	0.76				-
Self-efficacy			13.03**			
Before	25.46	6.24		-	-1.054**	-1.652**
After	27.41	3.08			-	-0.598**
Follow-up	28.54	2.15				-

Table 2 Comparing mean scores of knowledge, self-efficacy, outcome expectations and preventive behaviors on pesticide intoxication prevention between before, after and follow-up stage within intervention group (n =46) (Cont.)

Variables	$\bar{x}$	S.D.	F	Pairwise comparison		
				Before	After	Follow-up
Outcome expectations			21.04**			
Before	16.37	2.51		-	-0.522**	-0.717**
After	17.30	1.17			-	-0.196**
Follow-up	17.59	0.75				-
Preventive behaviors			75.42**			
Before	35.65	4.36		-	-2.272**	-2.750**
After	38.89	2.62			-	-0.478**
Follow-up	39.80	2.00				-

**p<0.01

Table 3 Comparing mean scores of knowledge, self-efficacy, outcome expectations and preventive behaviors on pesticide intoxication prevention between before, after and follow-up stage between group

Variables	Intervention (n = 46)		Control (n = 46)		t	p-value
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
Knowledge						
Before	8.30	1.58	7.98	2.38	0.775	0.441
After	9.46	1.19	8.17	2.31	3.347	0.001
Follow-up	9.70	0.76	7.89	2.42	4.819	<0.001
Self-efficacy						
Before	25.46	6.24	24.72	6.40	0.561	0.576
After	27.41	3.08	24.87	5.22	2.845	0.005
Follow-up	28.54	2.15	24.93	5.17	4.338	<0.001

Table 3 Comparing mean scores of knowledge, self-efficacy, outcome expectations and preventive behaviors on pesticide intoxication prevention between before, after and follow-up stage between group. (Cont.)

Variables	Intervention (n = 46)		Control (n = 46)		t	p-value
	$\bar{x}$	S.D.	$\bar{x}$	S.D.		
Outcome expectation						
Before	16.37	2.51	15.85	2.04	1.094	0.277
After	17.30	1.17	15.96	1.99	3.961	<0.001
Follow-up	17.59	0.75	16.07	1.89	5.077	<0.001
Preventive behavior						
Before	35.65	4.36	32.00	8.72	2.541	0.013
After	38.89	2.62	33.30	8.79	4.132	<0.001
Follow-up	39.80	2.00	33.35	8.29	5.137	<0.001

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Quality of Home Health Care Services in the Perspective of Perceptions and Expectations amongChronic Patients in Urban Communities, Suphanburi Province

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ABSTRACT

Current chronic diseases are important public health problems at the nation and global levels. The number of patients increased rapidly in urban areas, therefore there is an increased demand for home health care (HHC) services. The purpose of this descriptive research was to compare the perceptions and expectations of chronic patients on quality of HHC services in totally and 5 aspects. The study samples were conducted 100 chronic disease patients who lived in urban community of Suphanburi province with purposive sampling. Data was collected by interviewing with questionnaire. The content validity were done by three experts. The reliability value of this perception and expectation on quality HHC services were 0.94 and 0.96, respectively. Descriptive statistics and t-test were used to analyze data.

The results revealed that the perception of chronic patients on quality of HHC services was at a moderatelevel ($\bar{x}$= 3.50, S.D.=0.61). But the expectation was a high level.($\bar{x}$= 3.50, S.D.=0.61), especially in assurance aspect was highest score. Comparing the average expectation towards quality of HHC services were higher than the perceptions with a statistical significanceat the 0.001 level. Theme an difference between perception and expectation was empathy aspect. ($\bar{d}$=3.85). An important problem and obstacle was the number of officers is not enough and have less time to take care for chronic patients at home. So, the executives should be supported the operation of HHC service by strengthening a multi-healthcare professional team and increasing or circulated the number of HHC officials should be done.

The suggestion for health providers should be more times of home visits, given the time for service, talking for patient's will, and interested in listening all patients'problems. Moreover, eager to give advice about self care for patients and care givers were to support self care, and improve better quality of home health care.

Keywords : quality services, home health care, chronic disease patients, perception, expectation

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Table 1 Mean, standard deviation, and level of perceptions and expectations for quality home health services in both the overview and list of sides among chronic disease patients'perspectives in urban communities of Suphanburi province. (n=100)

Quality home health services	Perceptions		Level	Expectations		Level
	Mean	S.D.		Mean	S.D.	
1. Tangible service	3.46	0.63	moderate	4.09	0.80	high
2. Reliability service	3.52	0.73	moderate	4.05	0.91	high
3.Responsiveness service	3.46	0.71	moderate	4.09	0.68	high
4.Assurance service	3.64	0.66	moderate	4.19	0.76	high
5. Empathy service	3.51	0.70	moderate	4.16	0.75	high
Total	**3.50**	**0.61**	**moderate**	**4.10**	**0.75**	high

Table 2 Comparison of the difference between the perceptions and expectations of chronic disease patients on quality home health care services in both the overview and list of sides. (n =100)

Quality home health services	Perceptions		Expectations		t	p-value	
	Mean	S.D.	Mean	S.D.			$\bar{d}$
1. Tangible service	20.79	3.82	24.57	4.83	5.92	<0.001*	3.78
2. Reliability service	21.11	4.37	24.30	5.49	4.72	< 0.001*	3.19
3. Responsiveness service	20.76	4.26	24.58	4.59	5.79	< 0.001*	3.82
4.Assurance service	21.86	3.94	25.18	4.56	5.21	< 0.001*	3.32
5. Empathy service	21.09	4.21	24.94	4.49	5.81	< 0.001*	3.85
Total	**21.12**	**3.67**	**24.71**	**4.51**	**5.75**	**< 0.001***	**3.59**

*p <.0001

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Risk Perceptions, Practical Knowledge, and Management of Community's Healthcare Networks in Oil Spill*

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ABSTRACT

Oil spill disaster management is duty of the government agencies and private organizations involved in the response to helps minimized potential danger. Aims of the study were to study the relationship between organization type, practical knowledge, health risk perception and management of community's healthcare networks in Oil Spill, and the need for oil spill management capability improvement. Samples were community's healthcare network 101 people whom were selected by purposive sampling technique. Data were collected by the interview questionnaire, focus group and in-depth interview guidelines. The reliabilities of risk perception, practical knowledge, and management of community's healthcare network in oil spill questionnaires yielded values = .69 - .99. Quantitative data were analyzed by descriptive statistic and content analysis for qualitative data. Result revealed that 84.2% of community's healthcare network was members of community organization and 15.8% were governmental officer. The perception about risk of contact with hazardous chemical in crude oil was in middle level (M = 2.8, S.D. = 0.3), severity of chemical harm and their practical knowledge were in high level (M = 3.9, S.D. = 0.4 and M = 3.9, S.D. = 0.4, respectively). They provided health management in low level (48.5%). Factors significantly related to healthcare management of the network were type of the network (x^2 = 8.82, p-value < .05), provided material resources (x^2 = 8.09, p-value < .05), and practical knowledge (r = .203, p-value < .05). The result could recommended that community nurse should increase knowledge of community's healthcare network on oil spill response and resources preparedness, and strengthen participation of community organization to draw the local policy and contingency planning for comprehensive disaster management cycle.

Keywords: Risk perception, health management, health care network, oil spill

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Table 1 Relationships between organization factors and management of community's healthcare networks (n = 101)

Organizational factors	Management of community's healthcare networks		x^2	p-value
	No	Yes		
Type of networks			8.842	.003*
- community institution	39 (38.6)	46 (45.5)		
- government	1 (1.0)	15 (14.9)		
Essential resource			8.095	.004*
preparedness	40 (39.6)	50 (49.5)		
- Yes	0 (0.0)	11 (10.9)		
- No				
Extra budget			3.449	.063
preparedness	0 (0.0)	5 (3.0)		
- Yes	40 (39.6)	56 (55.4)		
- No				

*significant at p-value < .05

Table 2 Correlation coefficient between perceived exposure risk, perceived severity, perceived health effect, practical knowledge, and management of community's healthcare networks (n = 101)

	Management of community's healthcare networks		
	Mean (S.D.)	r	p-value
Risk perception of exposure	2.83 (0.35)	.001	.994
perceived severity	2.97 (0.43)	.019	.851
perceived health effect	3.96 (0.45)	.026	.793
practical knowledge	2.96 (0.47)	.203	.042*

*significant at p-value < .05

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Utilization of Transition Theory with Caring and Advice for Patients with Post Coronary Artery Bypass Graft Surgery

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ABSTRAC

Theory of Transition is a middle range theory and this theory can be applied to nursing fields. The critical part of the transition is the process occurring in a period and it impacts the direction of change which changes from a primary state of balance to a new state of balance, using the change of structure, knowledge, and self-management or behavior to the new state of balance. This transition has often occurred after the critical period of life, especially in critically ill patients. This theory is adapted to use as a model of the theory of transition with nursing care for patients undergoing coronary artery bypass graft surgery (CABG). The theory of transition has been used to assess, analyze, plan, implement, and evaluate nursing impacts. Thus, nurses' roles in caring patients undergoing CABG cover evaluating readiness for patients to live in a new environment, preparing patients and family, and supporting patients to increase ability to care themselves and modify behavior and lifestyle patterns in order to help and support patients and family to be adaptive and be able to change to the new state of living smoothly. If nurses have sufficient knowledge and understand the theory of transition, they will be able to apply this theory to nursing practice, nursing education, and nursing research to help increase better quality of nursing care for patients and family.

Keywords: Transition theory; Patients with post-surgery; Coronary artery bypass graft surgery

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Development of Ethical Behavior among Nursing Student in Becoming Moral Nurse

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ABSTRAC

Nursing profession is expected to be ethical in practice. The development of ethical behavior in nursing students since entering the nursing program is necessary. In the nursing program, teaching-learning activities in classrooms and practicum fields as well as in extra activities intend to promote nursing students' moral and ethics. In the classroom, instructors begin with course description analysis for all subjects to select specific subjects that ethical and moral aspects can be integrated in their teaching plans. In the practice, students should have activities such as daily pre-post conferences to insinuate ethics needed for the practice. Also students should write, analyze, reflect, and share their experiences related to ethical issues with other students and their instructors. In addition, extracurricular activities that help students to develop their ethical behavior should be provided to students as ongoing, age-appropriated, moral-reasoning centered, and corresponding to the reality of society. If nursing colleges promote ethics in their nursing education, nursing graduates will become moral nurses. This promotion could decrease complaints against nurses in the future.

Key words : Development of Ethical Behavior

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