SELECTED FACTORS ASSOCIATED WITH HEALTH STATUS OF PERSONNEL AT SUAN SUNANDHA RAJABHAT UNIVERSITY

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Abstract— The Cross sectional research aims to study the association between the selected individual's gender, age, income, education, marital status, nature of work and exercise behaviors and health status. The samples Personnel working in the university. Both men and women who volunteer to attend the annual health check in 2014. Of 265 people were collecting data with personal factors. Health Assessment Questionnaire about physical activity with Confidence = 0.7718, questionnaire exercise behavior with the confidence = 0.9683 using statistical data analysis, percentage, average, standard deviation and test Chi-square. The results showed that the samples were female, 69.1% and males 30.9%, mean age 36.68 years, the average income per month 19,675.96 baht, Status Single 59.6%, bachelor degree 57.8% Job as supporting staff as possible. 72.1% of the self-perceived health status and health conditions that typically 83.5% from the rate for health screening. Overall screening is not usually the most knowledgeable 70.2% to 86.8% with good exercise habits, proper exercise, 11.7%. The hypotheses showed that income associated with glycemic statistically significant (P-value <0.05), gender, age, income level, blood pressure was associated with a statistically significant (P-value <0.05), sex, cholesterol levels were associated with a statistically significant (P-value <0.05), sex and exercise behavior was associated with triglyceride levels was statistically significant (P-value <0.05). The results of this study can be used as basic guide and promote the health of individuals and communities can continue.

Keywords— Health Status, Personal factors.

I. INTRODUCTION

Non-communicable diseases are a major public The health problem in the world, including Thailand. Almost 70% of all deaths worldwide had a cause from Non Communicable Diseases (NCDs), including heart disease, stroke, cancer, diabetes and chronic lung disease and almost three quarters of all NCD deaths, and 82% of the 16 million people who died prematurely, or before reaching 70 years of age, occur in low- and middle-income countries. The rise of NCDs has been driven by primarily four major risk factors : tobacco use, physical inactivity, the harmful use of alcohol and unhealthy diets. [1] Thailand's population likely to be a longer age, but the disease has increased due to NCD. The factors that influence on NCD which were living hustling off balance with high stress, consumption convenient, eating insufficient of fruits and vegetables, excessive consumption, committed to work to do, lack of physical movement, lack of exercise, daily dietary habits so sweet, and salty. These are the major risk of non-communicable diseases such as kidney disease, diabetes, high blood pressure, dyslipidemia. [2] Thailand's projection for the next 20 years, pointed out that goes into an aging society with a population of elderly (65 and over) to more than 20 percent of the total population in the country. [3] Furthermore a third of Thais over 15 years old are overweight or obese. More than four fifths consume insufficient amounts of vegetable and fruit. Almost one fifth have insufficient exercise or physical activities. [4] This causes loss of health (Disability) and the life that stands up, but the quality of life decline. [2] Thai Health 2011 also presents an important feature on Health Impact Assessment (HIA) that is a particular social mechanism to protect lives considering individual, social and environmental. The key feature of HIA is a participatory learning process which can include all members in society. [4]
In Thailand are facing NCD, from diabetes data from the Bureau of Policy and Strategy Ministry of Public Health Meet people died from diabetes in the year 2009, about 7,019 people, or about 19 people per day, and a survey of the health status of people aged 15 years and over Thailand 2nd Year 1996-1997 compared to the three years from 1998 to 1999, prevalence increased from 4.4 percent to 6.9 percent for the fourth time as last time. Year 2008-2009 found the same prevalence of diabetes is 6.9 percent. Diabetes is a common cause of illness and premature death. [6]

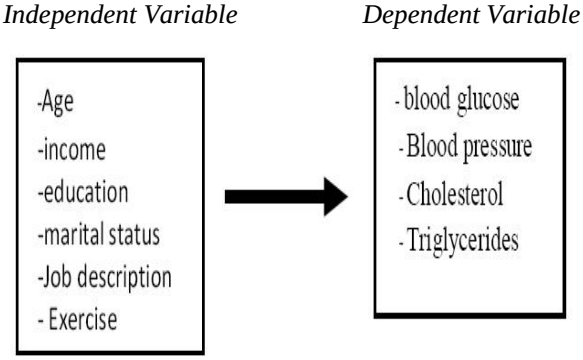
By helping vulnerable groups of Suan Sunandha Rajabhat University personnel to understand and realize the threat of Non-communicable disease for early prevention. Knowing the causes of disease know the early warning signs of diseases and learn self-care and prevent complications that arise as a consequence. Furthermore to promoting a healthy lifestyle ASEAN (Healthy ASEAN Lifestyles) is a major challenge.[5]

II.METHODS

A. Study design

The survey study by used cross-sectional study and took place in march, 2014, and study the association of personal Factors and health status

Figure I The Conceptual framework of the study



B. Participants

By purposive sampling both men and women of 265 people who volunteer to attend the annual health check *at College of Nursing and Health, Suan Sunandha Rajabhat* in 2014.

C. Procedures

Data collecting were, personal select factors, health assessment questionnaire having reliability at 0.7718, and exercise behavior with the confidence of 0.9683.

III. MEASUREMENT

1. Personal factors was collected by interviewing and data collection form.
2. Health Assessment from screening record form.
3. Physical activity and exercise behavior measured with questionnaires.

IV. DATA ANALYSIS

Statistical analyses were carried out with the statistical package program. Descriptive statistics for characteristics data of participant were given as, frequency and percentages.

For all analyses by statistical package analysis, a p-value of < 0.05 was considered statistically significant.

V. RESULTS

The results showed that the samples were female, 69.1% and males 30.9%, mean age 36.68 years, the average income per month 19,675.96 baht, marital status, most of them was Single 59.6%, bachelor degree education most of 57.8%,and working the job as supporting staff 77.0%, and 83.5% of the participant perceived themselves about health status and health conditions were normal. But the result from overall screening showed the participants were at risk of NCD 63.8%, the most knowledgeable 70.2% to 86.8% with good exercise habits, proper exercise, 11.7%.

Table I The association of personal factors and health status by Chi-Square test

Personal factors	Health status			
	Normal [n]	Abnormal [n]	χ^2 [df]	P value
Sex			3.506	0.061
Male	18	64	[1]	
Female	61	122		
Age (year)			4.928	0.425
20-29	37	71	[3]	
30-39	28	66		
40-49	11	29		
50-59	3	20		
Income/month			13.395	.009*
<10,000	71	131	[2]	
10,000-30,000	6	32		
>30,000	2	23		
Marital Status			2.888	0.224
single	45	113	[2]	
Couple	27	66		
Widowed / divorced / separated	7	7		
Education			0.223	0.636
Undergrad	11	22	[1]	
Postgraduate	68	164		
Job description			0.256	0.613
Administration			[1]	
Academic / Support	2 77	7 25		
Exercise Behavior			3.328	0.190
			[2]	
appropriate	7	24		
moderate	60	120		
inappropriate	12	42		

*** Statistically significant level p-value < 0.05**

Table II. The association of personal factors and blood pressure levels by Chi-Square test

Personal factors	Blood Pressure Levels (mmHg)		χ^2/ df	p-value
	normal (<130/85) [n]	High (>130/85) [n]		
Sex			7.539	.006*
Male	63	19	[1]	
Female	164	19		
Age (year)			24.289	.001*
20-29	100	8	[3]	
30-39	83	11		
40-49	31	9		
50-59	13	10		
Income			18.464	.001*
<10,000	177	5	[2]	
10,001-30,000	31	20		
>30,000	19	14		
Marital Status			1.179	.555
single	138	20	[2]	
Couple	78	15		
Widowed / divorced / separated	11	3		
Education			.151	.698
Undergrad	29	4	[1]	
Postgraduate	198	34		
Job description			.079	.779
Administration	8	1	[1]	
Academic / Support	219	37		
Exercise Behavior			1.797	.407
			[2]	
appropriate	29	2		
moderate	152	28		
inappropriate	46	8		

*** Statistically significant level p value < 0.05**

Table III The association of personal factors and blood Glucose levels by Chi-Square test

Personal factors	Blood Glucose Levels		χ^2/ [df]	p-value
	Normal (80-100mg%) [n]	High (>100mg%) [n]		
Sex		2	1.919	.66
Male	80	12	[1]	
Female	171			
Age (year)			2.038	.775
20-29	103	5	[3]	
30-39	88	6		
40-49	37	3		
50-59	23	0		
Income/month	8	3	12.559	.026*
<10,000	181	10	[2]	
10,001-30,000	62	1		
>30,000				
Marital Status			5.787	.055
Single			[2]	
Couple	153	5		
Widowed / divorced / separated	84	9		
	14	0		
Education			1.092	.296
Undergrad	30	3	[1]	
Postgraduate	221	11		
Job description			.632	.426
Administration	8	1	[1]	
Academic / Support	243	13		
Exercise			2.221	.329
Behavior			[2]	
appropriate	30	1		
moderate	172	8		
inappropriate	49	5		

*** Statistically significant level p -value < 0.05**

Table IV The association of personal factors and blood Cholesterol levels by Chi-Square test

Personal factors	blood Cholesterol levels		χ^2	p-value
	Normal (<200mg%) [n]	High (>200mg%) [n]		
Sex			5.793	.016*
Male	21	61	[1]	
Female	75	108		
Age (year)			9.232	.100
			[3]	
20-29	41	67		
30-39	35	59		
40-49	13	27		
50-59	7	16		
Income/month			.791	.374
<10,000	4	7	[2]	
10,001-30,000	76	115		
>30,000	16	47		
Marital Status			2.811	.245
Single	55	103	[2]	
Couple	33	60		
Widowed / divorced / separated	8	6		
Education			.164	.686
Undergrad	13	20	[1]	
Postgraduate	83	149		
Job description			.791	.374
Administration			[1]	
Academic / Support	2	7		
	94	162		
Exercise			3.294	.193
Behavior	11	20	[2]	
appropriate	71	109		
moderate	14	40		
inappropriate				

*** Statistically significant level p-value < 0.05**

Table V The association of personal factors and Blood Triglyceride Levels by Chi-Square test

Personal factors	Blood Triglyceride Levels		χ^2 [df]	Df/ [df]	p-value
	Normal (<150mg%) [n]	High (>150mg%) [n]			
Sex			17.599	1	.000*
Male	51	31	[1]		
Female	156	27			
Age (year)			6.874	3	.230
20-29	89	19	[3]		
30-39	70	24			
40-49	31	9			
50-59	17	6			
Income/month			6.019	2	.198
<10,000	7	4	[2]		
10,001-30,000	154	37			
>30,000	46	17			
Marital Status			.040	2	.980
single	124	34	[2]		
Couple	72	21			
Widowed / divorced / separated	11	3			
Education			1.000	1	.317
Undergrad	28	5	[1]		
Postgraduate	179	53			
Job description			.714	1	.398
dministration			[1]		
Academic /	6	3			
Support	201	55			
Exercise			9.659	2	.007*
Behavior	27	4	[2]		
appropriate	146	34			
Moderate	34	20			
Inappropriate					

*** Statistically significant level p-value < 0.05**

From the table I-V showed that the hypotheses testing the association of selected personal factors showed that income associated health status significant (P-value <0.05) as in table I, gender, age income per month with blood pressure significant (P-value <0.05) as in table II. From table III showed that income associated with glycemic significant (P-value <0.05).Regarding to association of blood cholesterol and personal factors that showed gender had significant associated with cholesterol as in table IV. From table V showed gender and exercise behavior were associated statistically (P-value <0.05) with triglyceride levels.

VI. DISCUSSION & CONCLUSION

The result from this research shows that the majority of participant 83.5% stated that their health condition is good, 83.5% and only 16.6% perceived their health not so good, but the result of annual health screening found that the participant were get the risk of NCD to 70.2% with hypertension, high blood sugar, high fat levels, triglyceride, cholesterol which higher than 30% of participant group. All these risk can develop to Metabolic Syndrome in the later life. By considering personal factors found that income is associated with the three factors. Those were risk to health status, high blood. Pressure and diabetes mellitus. [3], [5],[6],[7]. From the significant of this study shows that income is a factor that affects the health while exercise effect on triglyceride levels. For better protection should use strategies of modification

health behavior for increasing self regulation and self management, especially exercise daily eating. To promote eat more daily vegetable comsumption. This guide is according to the study of Intharakamhang,A.et.al (2010) [7],[10],[11]. Study of administration and evaluation to the health adaptation of Health Center in Bangkok 21 projects in 2009 found that participation group decrease BMI 65.36% , BP 61.45% , BS(DTX) 59.49% , mean that they can modified behavior must good self awareness so they can got self regulation at last they can self management to prevent complication both acute and chronic complication mean that they got self efficacy.[9]

By The self-management can improve health status. [9],[10] The self management program to control and prevent DM in daily life found that participation is more vegetable and stop to eat desert all the sweet fruits cooking, without sugar or just a little bit , daily eat fish. This results is also according to the study of Sumnuk, N. et.al (2011) [9] "Study of effective program modification behavior people health risk group to hypertension in community, Pakpanung district , Nakornsrithamaraj " found that participation got more knowledge, activities , exercises "Study of behavior modification in risk group to DM and hypertension" found that means of self management behavior about eating exercise increase after the study significant. The most common lifestyle in Thailand which risk metabolic syndrome were reduce physical activity, lack of self control, being overly courteous by not eating a healthy diet. [4] The lack of need to control their food intake is the key to prevention. [6],[8],[9] Thus in this program, the most participant increase the self regulation. That is the one guideline for controlling and prevention the chronic disease.

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