### Factors Related to Health-Promoting Behaviors among Thai Middle-Aged Men

Wonpen Kaewpan DrPH\*, Surintorn Kalampakorn PhD\*, Pipat Luksamijarulkul MSc\*\*

\*Department of Public Health Nursing, Faculty of Public Health, Mahidol University \*\*Department of Microbiology, Faculty of Public Health, Mahidol University

*Objective:* To study factors related to health promoting behaviors of Thai middle-aged men. *Study Design:* Descriptive research.

*Material and Method:* Nine hundred and five Thai males, aged between 40-59 years, living in six provinces of Thailand, were selected by multi-stage random sampling. Data were collected using interview, physical examination, and laboratory test.

**Results:** Thai middle-aged men mostly perceived their health status as fair (85.6%). Health screening showed that 7.2% had hormone deficiency, 65.7% had slight prostatic hypertrophy, and 27.3% had erectile dysfunction symptoms. Overall health promoting behaviors were at moderate level (50.7%). Marital status, having annual health examination, social support, receiving health information, and health belief were significantly related to health promoting behaviors (p < 0.05).

**Conclusion:** Providing health information through materials, media, and family members would also increase accessibility to health services and promote effective health-promoting behavior of Thai middle-aged men.

Keywords: Health promoting behavior, Middle- aged men

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Men over 40 years old are in a transition period between middle age and elderly<sup>(1)</sup>. In Thailand, middle age, which is called the "golden period", is specified between 40-59 years old<sup>(2)</sup>. As population structure in Thailand changed, the number of middle age and elderly people started to increase. In 2003, it is larger by 23% compared to that of 20 years ago<sup>(3)</sup>. This population tends to increase continuously and will become the largest group in the near future. Middle age is a period of physiological changes and degeneration of various organs. Examples of physiological changes and degeneration found during middle age include thinner hair and gray hair, dry skin and wrinkles, fat deposits, big belly, weak muscles, and decrease in bone mass density. In addition, changes of their body functions can affect health status by increasing susceptibility of having diseases such as hypertension,

overweight, and prostate cancer, especially in those over 50 years old<sup>(4)</sup>. Erectile dysfunction and physical and mental abnormalities from hormone deficiency are commonly found in this population group<sup>(5)</sup>. In addition, the health problems such as gastritis, hernia, and being injured from any accidents could happen easily in this group<sup>(6)</sup>.

A study on health risk of Thai middle-aged men indicated that health risk behavior among this population included drinking, smoking, going out at night, insufficient rest, lack of exercise, not paying attention to their health, and unsafe sexual related behavior<sup>(7)</sup>. This could lead to chronic diseases and deaths among them. Chronic diseases found among this population include hypertension, diabetes, and AIDS. Moreover, 17.5% of this population reported having back pain and joint pains.

Previous studies on health status of Thai middle-aged men indicated health problems related to hormone deficiency including, obesity, erectile dys-function, and severe prostate gland hypertrophy<sup>(8,9)</sup>.

Correspondence to : Kaewpan W, Department of Public Health Nursing, Faculty of Public Health, Mahidol University, Bangkok 10400, Thailand. Phone & Fax: 0-2354-8542, E-mail: phwkp@mahidol.ac.th

These health problems could definitely impact their job security and quality of life. An important strategy is to promote health-promoting behavior to maintain efficiently a good health status and strength, to keep healthy, and to reduce or prevent early degeneration. Walker et al<sup>(10)</sup> examined health-promoting behavior in six aspects of lifestyle. They included nutrition, exercise, health responsibility, interpersonal relationship, stress management, and self-actualization. The present study, therefore, aimed to examine health status and the health-promoting behavior. It will also examine the relationship between demographic factors, receiving social support, health beliefs, and health-promoting behavior among middle-aged men in all regions of Thailand. This basic information would be useful to specify a strategy of health promotion at the policy level and action plans to provide continuously more appropriate and continuous health services for middle-aged men in Thailand.

#### **Material and Method**

#### Study area and population

This is a cross-sectional study. In terms of sampling procedure, first, provinces considered as centers of education, transportation, and traveling were purposively selected from all regions of Thailand. The six studied provinces were Chiang Mai, Phuket, Khon Kaen, Suphanburi, Pathumthani, and Bangkok. Then, the multi-stage random sampling was applied. For each province, two districts were randomly selected. Next, two sub-districts were randomly selected from each district. Two villages were then randomly selected from each sub-district. Finally, a sample of 25 men aged between 40-59 years old in each village was randomly selected from the names listed in the family folders available at the primary care units. In Bangkok, 50 subjects were sampled out of the population in four communities of two districts randomly selected. In all, there were 1,200 subjects included in the present study including 200 subjects from Bangkok and 1,000 subjects from the other provinces.

Among 1,200 subjects, sample from each province were examined. Their health status using laboratory analysis, health screening, and physical examination by physician were completed.

#### **Research instrument**

## Data were collected using three following research instruments

*1. Questionnaire for middle-aged men* – This form was composed of three parts.

*Part 1* contained questions related to general information, social support, and health risk behaviors.

*Part 2* contained 46 questions related to health-promoting behaviors in six dimensions including self-actualization, health responsibility, nutrition, exercise behaviors, stress management, and interpersonal relationship. Questions in this part were adapted from a Health-promoting Life Style Profile (HPLP)<sup>(10)</sup>. Scores were given based on frequency according to the answer of each question. A 4-level rating scale was used to numerate the frequency as the answers were 'regularly' 'sometimes' 'rarely' and 'never'.

*Part 3* was related to health problems and included:

1) Hormone deficiency by using PADAM Score<sup>(11,12)</sup> screening test containing 17 questions (4 questions for physical symptoms, 3 questions for nervous system and blood circulation system, 5 questions for psychological symptoms, and 5 questions for sexual related problems). Scores were given based on frequency of having that specific symptom or problem. A 4-level rating scale was used to numerate the symptom as the answers were 'always' 'often', 'seldom', and 'never'.

2) Erectile dysfunction, using Modified SHIM-IIEF  $5^{(13)}$  screening test containing five yes-no questions related to symptoms of erectile dysfunction.

3) Prostate hypertrophy, using AUA Symptom Index for BPH<sup>(12)</sup> containing seven questions to assess abnormal urination related symptoms, and frequency.

4) Health belief regarding hormone deficiency<sup>(14)</sup> consisted of perceived susceptibility and severity of hormone deficiency questions. It also covered the perceived benefits and barriers of healthpromoting behavior. Subjects were asked to respond using a rating scale with the response ranging from 'strongly agree' to 'strongly disagree'.

Content validity of the questionnaire was examined by four experts. The questionnaire was pre tested in Sakaeo Province for its reliability. Cronbach's alpha coefficients of social support scale, health-promoting behaviors scale, and health belief regarding hormone deficiency scale were at 0.79, 0.94, and 0.79, respectively. These Cronbach's coefficients alpha were considered acceptable<sup>(15)</sup>.

#### Form 2: Laboratory testing report form

This form included results of blood density testing, liver cancer and hepatitis B testing, and CA marker screening for prostate cancer using ELISA technique.

#### Form 3: Patient Recording Form

This form was used to record the results of physical examination by physicians only.

#### Data collection

After getting permission from the Director General of Provincial Public Health Office and the Chief of Health Promotion and Nursing Section of each Provincial Public Health Office, the research team conducted the study in different areas at district, subdistrict, and village levels of each province. Research assistants comprised local professional nurses and public health officers working in health care services in the studied areas. These research assistants were trained for one day for data collection technique using interview questionnaires. There were 905 questionnaires returned, which accounted for 75.4% of all questionnaires distributed.

All 905 subjects were physically examined by physicians in community hospitals to asses their general health status. Then, those with health risks such as abnormalities in urinary tracts or blood borne diseases were recruited for laboratory analysis. One hundred and eighty seven subjects volunteered to have laboratory tests. They accounted for 20.7% of all subjects.

#### Statistical analysis

Descriptive analysis was used and presented as frequency, percentage, standard deviation, mean, median, and range. Analytical analysis was also used to analyze the relationship between various factors and health-promoting behavior using Pearson's product moment correlation coefficient and Chi-Square test<sup>(16)</sup>. A p-value of less than 0.05 was considered statistically significant.

#### Results

#### Demographic information

About 36.5% of the subjects were aged between 40-45 years, and the average age of the subjects was 48 years old. Most subjects (84.5%) were married and stayed with their wives. More than a half of the subjects (54.8%) had been educated at primary school level. Almost half of the subjects (41.4%) were daily employed, and about 26.5% were farmers. Most of them (46.5%) had a monthly income between 5,001-10,000 Baht, and the average income was 10,125.6 Baht (SD = 9,259.1). About 54.4% of the subjects reported having enough money for living and were without saving.

#### Health Status

#### General health status

A very high percentage of the subjects (85.6%) considered themselves moderately healthy; whereas 10.6% considered themselves healthy, and only 3.9% considered themselves unhealthy. The present study showed that many subjects (70.5%) had a history of chronic diseases. Diseases mostly found among the subjects were joint pains (14.1%), headache (14.0%), hypertension (6.2%), broken bone (5.6%), and hyper-

Health status	Yes n (%)	No n (%)	Total n (%)
	II (70)	II (70)	II (70)
Health status by physical examination $(n = 749)$			
Hypertension	65 (8.9)	669 (91.1)	734 (100.0)*
Presbyopia	142 (19.0)	606 (81.0)	748 (100.0)*
Oral health problem	111 (15.2)	621 (84.8)	732 (100.0)*
Musculoskeletal problem	20 (2.7)	728 (97.3)	748 (100.0)*
Hearing problem	11 (1.5)	738 (98.5)	749 (100.0)
Benign prostatic hyperplasia	9 (1.3)	684 (98.7)	693 (100.0)*
Lung function	8 (1.1)	740 (98.9)	748 (100.0)*
Abnormality in urinary tract	14 (1.9)	735 (98.1)	749 (100.0)
Laboratory analysis (N=187)			
Anemia	6 (3.2)	181 (96.8)	187 (100.0)
Hepatitis B	6 (3.2)	181 (96.8)	187 (100.0)
Prostatic Cancer by PSA	1 (0.5)	186 (99.5)	187 (100.0)

Table 1. Health status among Thai middle-aged men

\* Data avalaible

lipidemia (3.8%). About 18.9% of them had had broken arms and broken legs from accidents including car accidents.

Diabetes was a disease mostly reported in their family history (19.7%) followed by hypertension (18.2%), cancer (7.2%), stroke (3.4%), and cardiovascular disease (2.3%), respectively. Findings showed that almost half of the subjects (45.3%) had never had an annual health examination before, while only 21.0% had a regular annual health examination.

#### Health status by physical examination

The present study reported that most subjects (91.1%) had normal blood pressure, 19% had presbyopia (middle-age sight or unable to focus closely), 15.2% had dental caries, dental plaque, and gingivitis, 2.7% had some musculoskeletal problems, 1.9% had some abnormalities in the urinary tract, 1.5% had hearing problems, 1.3% had prostate gland hypertrophy, and 1.1% had abnormal lung function (Table 1).

#### Laboratory analysis

About 3.2% of subjects had anemia and 3.2% were hepatitis B carriers. According to the PSA test, it was reported that one subject (0.5%) was at risk to have prostate cancer (Table 1).

# Screening for hormone deficiency symptoms using PADAM score

Results indicated that 7.2% of the subjects had hormone deficiency. Among these hormone deficient subjects, 62.2% had physical symptoms, 47.9% had psychological symptoms, and 9.1% had sexually related problems (Table 2).

## Screening for prostatic hypertrophy using AUA Symptom index

It was found that 65.7% of the subjects had

Table 2.	Health status among Thai middle-aged men by
	screening questionnaire $(n = 893)$

	Number	%
Hormone Deficiency		
by PADAM Score		
Yes	829	92.8
No	64	7.2
Total	893	100.0
Prostatic hyperthophy		
by AUA Symptom Index		
Normal	102	11.4
Minor	587	65.7
Moderate	177	19.8
Severe	27	3.0
Total	893	100.0
Erectile Dysfunction		
Yes	241	27.3
No	642	72.7
Total	893	100.0

**Table 3.** Health risk behaviors of Thai middle-aged men

Health risk behaviors	Number	%
Smoking		
Every day	265	38.9
Sometimes	135	19.8
No	282	41.3
Total	682*	100.0
Drinking Alcohol		
Every day	8	0.9
Sometimes	651	73.7
No	224	25.4
Total	883	100.0

\* Data available

	Yes n (%)	No n (%)	Total n (%)
Have operation or organ transplant or renal dialysis	86 (9.6)	808 (90.4)	894 (100.0)
Contact with other's blood borne	72 (8.1)	822 (91.9)	894 (100.0)
Had tattoo	193 (21.6)	701 (78.4)	894 (100.0)
Multiple sex partners	159 (17.8)	735 (82.2)	894 (100.0)
Used to be male prostitutes	66 (7.4)	828 (92.6)	894 (100.0)
Homosexual	59 (6.6)	835 (93.4)	894 (100.0)
Had history sexual transmitted diseases last year	20 (2.2)	874 (97.8)	894 (100.0)

Table 4. Health risk behaviors related to blood born and sexual transmission diseases of Thai middle-aged men (n = 894)

minor prostate gland hypertrophy, 19.8% had moderate hypertrophy of the prostate gland, 3.0% had severe prostate gland hypertrophy, and 27.3% had erectile dysfunction (Table 2).

#### Health risk behavior

The present study reported that 38.9% of the subjects smoked everyday with the average of 12.4 cigarettes per day, 0.9% drank alcohol regularly or on a daily basis, and 20.0% used to drink a lot of alcohol until they became unconscious (Table 3).

# Risk behavior related to blood-borne and sexually transmitted diseases

Findings indicated that 9.6% of the subjects had had an operation or organ transplant or renal dialysis before, 8.1% had had direct contact with

others' blood and serum, 21.6% had tattoos, and 2.2% used to be drug addicts and took drugs by injection. About 17.8% used to have sex with other persons who were not their own wives and did not use condoms, 7.4% used to be male prostitutes, 6.6% were homosexual, and 2.2% had had sexually transmitted diseases during the last year (Table 4).

#### Social support, receiving health information about hormone deficiency, and health belief regarding hormone deficiency

#### Social support

The present study reported that 45.8% of the subjects received high social support. To analyze by types of support, it was found most subjects received support on their personal life and work, health care support, financial support, and support on crises related

Table5. Number and percentage of Thai middle-aged men classified by level of health belief regarding hormone deficiency(n = 899)

Health belief regarding hormone deficiency	Level of health belief regarding hormone deficiency			
	High	Moderate	Low	Total*
	Number (%)	Number (%)	Number (%)	Number (%)
1. Perceived susceptibility of hormone deficiency	248 (27.8)	610 (68.5)	33 (3.7)	891 (100.0)
2. Perceived severity of hormone deficiency	85 (9.5)	778 (86.7)	34 (3.8)	897 (100.0)
3. Perceived benefits of health promoting behaviors	722 (80.9)	159 (17.8)	12(1.3)	893 (100.0)
4. Perceived barriers of health promoting behaviors	288 (32.2)	495 (55.3)	112 (12.5)	895 (100.0)
5. Health motivation	521 (58.3)	356 (39.8)	17 (1.9)	894 (100.0)
Overall health belief regarding hormone deficiency	292 (32.5)	598 (66.5)	9 (1.0)	899 (100.0)

\* Data available

Table 6. Number and percentage of middle-aged men classified by level of health promoting behaviors (n = 901)

Health promoting behaviors among	L	Levels of health promoting behaviors			
Thai middle-aged men	High	Fair	Low	Total*	
	Number (%)	Number (%)	Number (%)	Number (%)	
1. Self-actualization	637 (71.0)	238 (26.5)	22 (2.5)	897 (100.0)	
2. Health responsibility	158 (17.6)	416 (46.3)	324 (36.1)	898 (100.0)	
3. Nutrition	441 (49.2)	398 (44.4)	57 (6.4)	896 (100.0)	
4. Exercise behaviors	193 (21.5)	336 (37.5)	367 (41.0)	896 (100.0)	
5. Stress management	483 (54.2)	376 (42.2)	32 (3.6)	891 (100.0)	
6. Interpersonal relationship	485 (54.1)	365 (40.7)	47 (5.2)	897 (100.0)	
Overall health promoting behaviors	420 (46.6)	457 (50.7)	24 (2.7)	901 (100.0)	

\* Data available

to work and personal issues at moderate levels (44.1%, 48.3%, 47.2%, and 46.2%, respectively). Most of this support was from their wives and family members.

#### Receiving health information about hormone deficiency

Very high proportion of the subjects (97.3%) reported receiving health related information about hormone deficiency. Among these subjects, sources of information were from television (75.4%), newspaper (38.9%), radio (27.7%), health care personnel (26.1%), family members and relatives (16.2%), posters or leaflets in hospitals, health stations, and community health centers (16.0%), and close friends (15.1%).

#### Health belief regarding hormone deficiency

Most of the subjects (66.5%) had health belief regarding hormone deficiency at a moderate level. It was found that subjects mostly perceived susceptibility of hormone deficiency, perceived severity of hormone deficiency, and perceived barriers of health-promoting behaviors at a moderate level (68.5%, 86.7%, and 55.3% respectively). Whereas, 80.9% and 58.3% of the subjects, respectively, had beliefs at high level regarding perceived benefits of health-promoting behaviors and health motivation (Table 5).

## Health-promoting behaviors among Thai middle-aged men

Results indicated that half of the subjects (50.7%) generally performed health-promoting behavior at a fair level; whereas, 46.6% of them performed these behavior at a high level. The present study also reported that most of the subjects had health-promoting behavior related to self-actualization, nutrition, stress management, and interpersonal relationship at high

levels (71.0%, 49.2%, 54.2%, and 54.1%, respectively). However, it was found that 46.3% of the subjects had health responsibility as fair level and 41.0% performed exercise behaviors at a low level (Table 6).

#### Relationship between demographic factors, social support, receiving health information, and health belief regarding health-promoting behavior among Thai middle-aged men

Findings showed that demographic factors including marital status, having annual health examination, and receiving health information were all statistically significantly (p < 0.05) as related to health-promoting behavior of Thai middle-aged men (Table 7).

Social support and health belief regarding hormone deficiency were positively related to healthpromoting behavior among Thai middle-aged men at a low level (r = 0.303, p-value = 0.000, r = 0.158, p-value = 0.000, respectively). Perceived benefits of healthpromoting behavior and health motivation were both

**Table 7.** Relationship between health promoting behaviorsand demographic factors and receiving of healthinformation among Thai middle-aged men (n = 881)

Factors	n	$\chi^2$	df	p-value
Demographic factors Marital status Having annual health examination Receiving health information	881+ 850+ 879+	25.853 24.103 59.083	2 4 2	0.000* 0.000* 0.000*

\* p-value < 0.05

<sup>+</sup> Data available

 Table 8. Relationship between health promoting behaviors and social support and health belief related to hormone deficiency among Thai middle-aged men (n = 892)

Health belief regarding hormone deficiency	n	r	p-value
Overall health belief regarding hormone deficiency	892	0.158	0.000*
1) Perceived susceptibility of hormone deficiency	886+	0.035	0.294
2) Perceived severity of hormone deficiency	890+	0.031	0.361
3) Perceived benefits of health promoting behaviors	889+	0.072	0.031*
4) Perceived barriers of health promoting behaviors	888+	-0.119	0.000*
5) Health motivation	890+	0.124	0.000*
Social support related factors	863+	0.303	0.000*

\* p-value < 0.05

+ Data available

positively related to a low level to health-promoting behavior (r = 0.072, p-value = 0.031 and r = 0.124, pvalue = 0.000, respectively). In addition, the data showed that perceived barriers of health-promoting behavior were negatively related to health-promoting behavior of Thai middle-aged men at low level with statistical significance level at 0.05 (r = -0.119, p-value = 0.000) (Table 8).

#### Discussion

The present study showed that 85.6%, which was considered a very high percentage, of the studied population of Thai middle-aged men perceived their health status at moderate level. Among these studied subjects, it was reported that 70.5% had a history of chronic diseases, and their physical examination showed 7.2% with hormone deficiency, 27.3% with erectile dysfunction, and 65.7% with slight or minor prostate gland hypertrophy. Moreover, it was shown that the majority of the subjects had problems with middle-age sight or unable to focus closely, dental caries, muscle pains, and hearing problems. Although these problems may be caused by physical degeneration, this population would still need to be taken care of, advised, and helped by healthcare personnel and their family members in order to enhance their quality of life.

Regarding health-promoting behavior, the present study reported that 50.7% of Thai middleaged men performed health-promoting behavior at moderate level similarly with findings from studies by Panumartrasamee and Kaewpan<sup>(9)</sup> and Sawatsri et al<sup>(8)</sup>. When types of health-promoting behavior were considered, it was shown that exercise behavior of 41.0% of subjects was at a low level. Reason mostly given for non-exercising is related to subject's occupation. Those who were daily employed or farmers thought that their work had made them spend a lot of energy. They considered their work was physical activity and always felt tired and sleepy when they arrived home after work. They also felt that they did not need more exercise after work. In addition, these Thai middleaged men also felt that the Ministry of Public Health's exercise program like aerobic dance was a women-type exercise. Therefore, they did not feel comfortable and would not like to join the aerobic dance in their communities with women at all.

In relation to health-promoting behavior, the present study indicated that behaviors regarding selfactualization, stress management, nutrition, and interpersonal relationship among the studied subjects were all performed at high levels. It was shown that most of the studied population of Thai middle-aged men felt happy and satisfied with their lives, they were mostly optimistic and had their future well planned. Furthermore, they knew their capability, and always accepted changes. They, additionally, tried to move on to become successful and make their life more worthy. In addition, it was found that most subjects always had right and balanced diets with all the required macro nutrients. They had breakfast everyday and tried to cut down some sugar- and fat-rich diets. These all could definitely contribute to good health. Regarding interpersonal relationship, it was found that most subjects had a good relationship with their family members, close friends, and relatives. Most of them were always supported and taken good care of by their family members, close friends, and relatives, especially when they had problems or got sick.

To analyze factors related to health-promoting behavior, it was found that marital status of the subjects and having regularly annual health examination were both related to health-promoting behavior of Thai middle-aged men. This might be because having annual health examination was always a factor directly related to personal responsibility. Men usually see physicians only when they were having severe health problems, and they always had their health examination if they were encouraged by their family members<sup>(4)</sup>. The present study also showed that receiving health information was statistically related to health-promoting behavior of Thai middle-aged men. Consistently with the concept of cues to action by Becker *et al*<sup>(14)</sup> that media campaigns and advice from healthcare personnel and friends were types of social and psychological factors that could lead a person to prevent diseases.

Findings indicated that perceived health status of Thai middle-aged men was not related to their health-promoting behavior. This might be because most subjects assessed themselves as moderately healthy and did not feel they needed to perform any health-promoting behavior. Health belief regarding hormone deficiency was related to health-promoting behavior among Thai middle-aged men. It was found that perceived benefits of health-promoting behavior and health motivation were positively related to healthpromoting behavior. This means that the more perceived benefits of health-promoting behavior and motivation they have, the more health-promoting behavior they will perform. This complied with Becker et al<sup>(14)</sup> who indicated that a person needed to firstly believe and perceive that an activity could prevent or treat some

diseases before judging whether or not he/she would finally choose to conduct that activity. Additionally, health motivation given by healthcare personnel and various types of media were considered stimulation factors leading a person to perform more health-promoting behavior.

In addition, the present study reported that social support was positively related to health-promoting behavior of these Thai middle-aged men. This reflects that if Thai middle-aged men had someone to take care of or to motivate them, their motivation to see physicians and perform health behaviors would be increased. Consistently, the concept of social support, which indicated that family and friends had important roles to motivate and persuade or support some healthpromoting behavior of a person, was considered as interpersonal influence leading to an increase in healthpromoting behavior<sup>(17)</sup>.

Health belief, regarding perceived barriers of health-promoting behavior was reported negatively and related the low level of health-promoting behaviors among Thai middle-aged men. This showed that when Thai middle-aged men realized or perceived that there were more barriers to health-promoting behavior, they would perform health-promoting behavior less. Becker et al<sup>(14)</sup> indicated that if once a person perceived that a specific activity wasted time and money, that person would always decide not to perform that activity. The detailed analysis of the present study showed an uncomfortable feeling and shyness in consulting with healthcare personnel, feeling that annual health examination is wasted time and money, feeling that it was difficult to follow healthy guidelines, and a feeling that there is no time to exercise. These were all considered as barriers to health-promoting behavior among Thai middle-aged men. In addition, these subjects believed that their physical changes during the middle-aged period were natural occurring processes that could happen to anybody. Therefore, there was no reason to worry too much about these changes in their health. Hence, these beliefs were all barriers to health-promoting behavior. Therefore, Thai middle-aged men should be given some advice and consulted the benefits and importance of health care as well as healthcare services that should be developed to be more easily accessible for them.

The results of the present study could be used at policy and administrative levels to set up action plans and provide financial support for the development of healthcare services and healthcare centers for special target groups. Regarding technical information, health care personnel in both clinics and communities should be well trained and given more information about middle-aged men. These healthcare personnel should be able to take good care of middle-aged men. Information should be also sufficiently provided to middleaged men through different types of media such as pamphlets, leaflets, radio in communities, and health service centers. Special clinics for middle-aged men should also be made easily accessible in public health service centers at both district and provincial levels. In addition, special campaigns or projects focused on annual health examination should be initiated to monitor and investigate diseases mostly found among this population group. Furthermore, there should also be a health care transferring system provided at all levels for continuous healthcare services in Thailand. In addition, the model to enhance health-promoting behavior with participatory approach should be developed in future research.

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### ปัจจัยที่มีความสัมพันธ์กับพฤติกรรมส่งเสริมสุขภาพของชายไทยวัยกลางคน

### วันเพ็ญ แก้วปาน, สุรินธร กลัมพากร, พิพัฒน์ ลักษมีจรัลกุล

### **วัตถุประสงค**์: เพื่อศึกษาพฤติกรรมส<sup>ุ่</sup>งเสริมสุขภาพและวิเคราะห์ปัจจัยที่มีความสัมพันธ์กับพฤติกรรมส<sup>ุ่</sup>งเสริมสุขภาพ ของชายไทยวัยกลางคน

### รูปแบบการวิจัย: การวิจัยเชิงสำรวจ

**้วัสดุและวิธีการ**: กลุ่มตัวอย่างเป็นซายไทยวัยกลางคนอายุระหว่าง 40-59 ปี สุ่มโดยการสุ่มแบบหลายขั้นตอน ใน 6 จังหวัดทุกภาคของประเทศไทย ได้แก่ จังหวัดภูเก็ต เชียงใหม่ ขอนแก่น ปทุมธานี สุพรรณบุรีและกรุงเทพฯ รวม 905 คน เก็บรวบรวมข้อมูลโดยการสัมภาษณ์ตามแบบสอบถาม การตรวจสุขภาพและการตรวจทางห้องปฏิบัติการ **ผลการศึกษา**: ซายไทยวัยกลางคนส่วนใหญ่รับรู้ภาวะสุขภาพสมบูรณ์แข็งแรงในระดับปานกลาง ร้อยละ 85.6 มีภาวะ อาการพร่องฮอร์โมนเพศซาย ร้อยละ 7.2 มีภาวะต่อมลูกหมากโตเล็กน้อย ร้อยละ 65.7 มีอาการพร่องสมรรถภาพ ทางเพศ ร้อยละ 27.3 พฤติกรรมส่งเสริมสุขภาพโดยรวมอยู่ในระดับปานกลาง (50.7%) ปัจจัยส่วนบุคคล (ได้แก่ สถานภาพสมรสคู่ และการรับการตรวจสุขภาพประจำปี) การได้รับแรงสนับสนุนทางสังคม การรับรูข้อมูลข่าวสาร เกี่ยวกับอาการพร่องฮอร์โมนเพศซาย และความเชื่อด้านสุขภาพเกี่ยวกับภาวะพร่องฮอร์โมนเพศซายมีความสัมพันธ์ กับพฤติกรรม ส่งเสริมสุขภาพของซายไทยวัยกลางคนอย่างมีนัยสำคัญทางสถิติ (p-valve < 0.05) **สรุป**: ควรสร้างเสริมสุขภาพซายไทยวัยกลางคนโดยการให้ความรู้ผ่านสื่อต่าง ๆ รวมทั้งการได้รับสนับสนุนจากคน ในครอบครัวเพื่อเข้าถึงการบริการและส่งเสริมให้ชายไทยวัยกลางคนมีพฤติกรรมส่งเสริมสุขภาพดีขึ้น