

# Survey of Mental Health Status of Thai Physicians

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*This survey was aimed at obtaining a screening survey on mental health status of Thai physicians. We systematically sampled to obtain 440 Thai physicians from the directory of Thai Center for Continuing Medical Education (CCME). Then, we obtained their mental health status by mailing a questionnaire containing Thai GHQ-28 and asking them to reply, later we obtained through telephone interview. The response rate was 86.3 percent, and 60.3 percent of them were male. The result revealed that 15 male and 13 female physicians had abnormal mental health status. The overall prevalence rate of abnormal mental health status was 7.4 percent. We also found a significant negative association between mental health status and career satisfaction and the use of sedatives in the past 6 months.*

*This study pointed out that mental health of some Thai physicians was to be concerned. These problems, along with their physical health problems, should be tackled systematically and preventatively in order to have the majority of Thai physicians in good health and able to serve the population more effectively.*

**Keywords:** Mental health, Thai physician

**J Med Assoc Thai 2004; 87(Suppl 4): S9-13**

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## Background and rationale

Recently, the significance of mental health has been widely recognized. Mental health problems also affect physical health, work performance, and social life of those affected. Studies on Thai people stress and mental health revealed that 67.6 percents were under stress, and their related physical health problems were headache, forgetfulness, insomnia, and lack of intention. Factors related to these were work-related problems, school and educational problems, and financial problems<sup>1</sup>. Several studies addressed work-related factors in detail and found that they were job characteristics, job satisfaction, personality, work load, hours of work, relationship with superiors, friends at work and subordinates<sup>2-12</sup>, and their financial and social status.<sup>5-7, 16</sup>

The characteristics of their job make physicians a group of occupation at high risk of mental health problems. They had to work under several health hazards: physical, biological, chemical, psychosocial, including accidents<sup>13-20</sup>. This put them under severe stress, not to mention their responsibility for their patients' life and health and the trend of more likely to be sued. Physicians with mental health problems might be at risk of poor performance, thus putting their patients in even higher risk. We would like to explore this issue so we cross-sectionally collected mental health status by Thai General Health Questionnaire (GHQ) along with the health survey of Thai physicians previously reported.<sup>21</sup>

This study was aimed at screening of mental health status of Thai physicians by Thai GHQ-28 to obtain the current picture of physicians' mental health, explore some related factors, and use as baseline for further activities to promote their health.

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## Methodology

The study population was all 27,477 Thai physicians with a medical license number listed in the registry of the Center for Continuing Medical Education (CCME) in 2003. The study subjects were 440 physicians obtained from systematic random sampling.<sup>21</sup>

The study tools were self-administered questionnaires comprised of two parts: general characteristic and other questions,<sup>21</sup> and the Thai GHQ-28. The GHQ was a screening tool for mental health problems first developed by Goldberg in 1972. This was currently the most widely used screening tool, with translation into more than 36 languages. The Thai GHQ has several variations depending on the number of questions used: GHQ-60, GHQ-30, GHQ-28, and GHQ-12. All these variations had high reliability and validity. Their internal consistency assessed by Cronbach's alpha coefficients were about 0.84 to 0.94, with the sensitivity of 0.78 to 0.85, and specificity of 0.84 to 0.90, and were appropriate for Thai population. In this study, we decided to use Thai GHQ-28, which could be divided into 4 subgroups: group 1, number 1-7, somatic symptoms; group 2, number 8-14, anxiety and insomnia; group 3, number 15-21, social dysfunction; and group 4, number 22-28, severe depression.

The scoring system for GHQ has 2 approaches: Goldberg score (0-0-1-1), and Likert score (0-1-2-3). Previous study found high correlation between the 2 approaches to be 0.92- 0.94.<sup>23</sup> For Thai GHQ-28, the cut point of 5/6 was used to differentiate the normal and the abnormal<sup>22, 23</sup>.

We mailed these questionnaires to all study subjects, and after two rounds of mails we decided to interview by telephone.

## Data analyses

SPSS for Windows was used for the analyses, and chi-square tests were used to explore the relationship between 2 qualitative variables.

## Results

We obtained 380 questionnaires yielding a response rate of 86.3 percent. Our previous report<sup>21</sup> has details on population characteristics, data on their work and career, their health, life style, their health promotion activities, and their exposure to health hazards.

### Data on mental health status

Analyses of Thai GHQ-28 revealed that 352 were normal, 214 male and 138 female. There were 28 physicians with abnormal GHQ-28, 15 male and 13 female, yielding a prevalence rate of 7.4 percent. Table 1 shows distribution of general characteristic of Thai physicians and their mental health status. Table 2 shows distribution of data on the past 6 months of Thai physicians and their Thai GHQ-28. Table 3 shows numbers and percents of results by Thai GHQ-28 by sub-scale. Relationship between GHQ-28 score and general characteristics are shown in Table 4.

Analyses by chi-square tests revealed no association based on gender, specialty, age, working in private or governmental organization, owning a clinic, sleeping hour, working hour, having a disease, family member having a disease, sickness in the past 6 months, smoking, alcohol drinking, exercise, recreational tour, practicing religious activities, spending in stock market, exposure to physical hazards such as radiation and noise, exposure to chemical hazards such as anesthetic gases and solvents including formalin, exposure to biological hazards such as blood and taking care of or operating on HIV/AIDS patients.

And results revealed the negative association between mental health problems and career satisfaction and use of tranquilizer in the past 6 months. Physicians with moderate to low satisfaction were more likely to have abnormal Thai GHQ-28 than those with high satisfaction. Physicians who used tranquilizer in the past 6 months were more likely to have abnormal Thai GHQ-28 than those who did not use.

## Discussion

The response rate was 86.3 percent which was quite good. The majority of Thai physicians had normal GHQ-28 scores. The prevalence of abnormal was 7.4 percent. The results revealed significant negative association between abnormal Thai GHQ-28 score and moderate to low satisfaction and use of tranquilizer in the past 6 months. This could be used as warning signs for physicians to look for their colleagues who might have

**Table 1.** General characteristic of Thai physicians and their mental health status

Characteristic	Result by Thai GHQ-28	
	normal	abnormal
Gender (n=380)		
male	214	15
female	138	13
Being Trained as a specialist (n=380)		
yes	227	17
no	125	11
Age (n=372)		
younger than 30 years	85	10
30-50 years	178	13
older than 50 years	83	3
Career satisfaction (n=379)		
high	218	10
low-moderate	133	18
Their work organization (n=337)		
government	221	22
private	90	4
Running a clinic (n=377)		
yes	100	11
no	249	17
Duration of sleep (n=380)		
less than 6 hr/day	138	7
6-8 hr/day	203	21
more than 8 hr/day	11	0
Hours of work (n=355)		
equal to or less than 40 hr/week	79	6
more than 40 hr/week	249	21
Having a disease (n=378)		
yes	127	10
no	223	18
Family member having a disease (n=373)		
yes	269	26
no	76	2
Being sick in the past 6 months (n=380)		
yes	174	15
no	178	13
History of smoking (n=380)		
yes	78	6
no	274	22
History of alcoholic drinking (n=380)		
yes	128	9
no	224	19

abnormal mental condition and give them some help before things get worse. This could be also used to generate further hypotheses to understand more on physicians' mental health. It needs to be emphasized that this study was only a cross-sectional one aimed to screen for abnormal mental condition, and not a definite diagnostic tool. However, those with abnormal

**Table 2.** Data in the past 6 months of Thai physicians and their Thai GHQ-28

Data in the Past 6 months	Result by Thai GHQ-28	
	normal	abnormal
Exercise (n=380)		
yes	214	15
no	138	13
Travel for leisure (n=377)		
yes	260	24
no	89	4
Doing religious(n=379)		
yes	276	23
no	75	5
Spending in stock market (n=380)		
yes	37	2
no	315	26
Use of tranquilizer (n=380)		
yes	50	13
no	302	15
Exposure to noise (n=379)		
yes	139	12
no	212	16
Exposure to anesthetic (n=379)		
yes	122	8
no	229	20
Exposure to formalin (n=377)		
yes	137	10
no	212	18
Exposure to to blood ( n=379)		
yes	294	26
no	57	2
Taking care of or operating HIV patient ( N=375)		
yes	239	23
no	109	4

**Table 3.** Numbers and percents of results by Thai GHQ-28 by sub-scale

Results by Thai GHQ-28	Number (percent)
Normal	352 (92.6)
Abnormal	28 (7.4)
Anxiety and insomnia	10
Somatic symptoms	7
Social dysfunction	4
Severe depression	0
Somatic symptoms and anxiety	3
Somatic symptoms and social dysfunction	1
Social dysfunction and severe depression	1
Somatic symptoms and anxiety and social dysfunction	2

**Table 4.** Relationship between GHQ-28 score and general characteristics

Relationship between GHQ-28 score and each characteristic	Chi square	df	p-value
Gender (n=380)	0.565	1	0.452
Being Trained as a specialist (n=380)	0.161	1	0.688
Age (n=372)	3.460	2	0.177
Career satisfaction (n=379)	7.537	1	0.006*
Their work organization (n=337)	2.192	1	0.139
Running a clinic (n=377)	1.411	1	0.235
Duration of sleep (n=380)	3.568	2	0.168
Hours of work (n=355)	0.494	1	0.475
Having a disease (n=378)	0.004	1	0.952
Family member having a disease (n=373)	3.480	1	0.062
Being sick in the past 6 months (n=380)	0.178	1	0.673
History of smoking (n=380)	0.008	1	0.929
History of alcoholic drinking (n=380)	0.200	1	0.654
exercise in the past 6 months (n=380)	0.012	1	1.000*
Travel for leisure in the past 6 months (n=377)	1.735	1	0.188
Doing religious activities in the past 6 months (n=379)	0.192	1	0.661
Spending in stock market in the past 6 months (n=380)	0.320	1	0.754*
Use of tranquilizer in the past 6 months (n=380)	19.474	1	0.000*
Exposure to radiation in the past 6 months (n=373)	1.881	1	0.170
Exposure to noise in the past 6 months (n=379)	0.115	1	0.735
Exposure to anesthetic gases in the past 6 months (n=379)	0.440	1	0.507
Exposure to formalin in the past 6 months (n=377)	0.137	1	0.712
Exposure to blood in the past 6 months (n=379)	1.632	1	0.281*
Taking care of or operating HIV patients in the past 6 months (n=375)	3.243	1	0.072

\* p-value < 0.01    <sup>a</sup> Fisher's Exact test

scores should be advised and suggested and, if needed, undergo some other tests or see psychiatrists. Another limitation of this study was that there were no comparison groups, so more analytic studies or some studies on other groups to compare should be considered.

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## การสำรวจสุขภาพจิตของแพทย์ไทย

พรชัย สิทธิศรัณย์กุล, ھرรษา รัชชาคม, นวพรรณ ผลบุญ, เบญจพร บุญเทียม, ทวีศิลป์ วิษณุโยธิน, สมเกียรติ วัฒนศิริชัยกุล

การสำรวจนี้มีวัตถุประสงค์เพื่อสำรวจคัดกรองปัญหาสุขภาพจิตของแพทย์ไทย โดยทำการสุ่มเลือกอย่างเป็นระบบจากกลุ่มแพทย์ไทยที่มีเลขที่ใบอนุญาตประกอบวิชาชีพเวชกรรมและมีชื่ออยู่ในทะเบียนรายชื่อของศูนย์การศึกษาต่อเนื่องของแพทย์ เก็บข้อมูลทางด้านสุขภาพจิตโดยใช้แบบสำรวจคัดกรองปัญหาสุขภาพจิต Thai GHQ-28 ที่ส่งทางไปรษณีย์และการสัมภาษณ์ทางโทรศัพท์ ผลการสำรวจพบว่าอัตราการตอบแบบสอบถามกลับคืนคิดเป็นร้อยละ 86.3 เป็นเพศชายคิดเป็นร้อยละ 60.3 มีผลการประเมินภาวะสุขภาพจิตอยู่ในเกณฑ์ผิดปกติ 15 คน เป็นเพศหญิงคิดเป็นร้อยละ 39.7 มีผลการประเมินภาวะสุขภาพจิตอยู่ในเกณฑ์ผิดปกติ 13 คน โดยสรุปพบความชุกของปัญหาสุขภาพจิตของแพทย์ไทยคิดเป็นร้อยละ 7.4 และพบว่าภาวะสุขภาพจิตมีความสัมพันธ์ทางลบกับความพึงพอใจในวิชาชีพแพทย์และประวัติการเข้ายานอนหลับในช่วง 6 เดือนที่ผ่านมาอย่างมีนัยสำคัญทางสถิติ

ผลการวิจัยนี้ชี้ให้เห็นถึงภาวะสุขภาพจิตในกลุ่มแพทย์ที่มีแนวโน้มที่จะมีปัญหาสุขภาพจิต ซึ่งควรหาแนวทางป้องกันและสืบหาสาเหตุต่อไปเพื่อสุขภาพจิตที่ดีของแพทย์ ทำให้สามารถปฏิบัติหน้าที่ได้อย่างสมบูรณ์และดำรงชีวิตในสังคมได้อย่างมีความสุข