



# ทัศนคติต่อผู้ใช้เครื่องดื่มแอลกอฮอล์และสาร เสพติดของนักศึกษาแพทย์ คณะแพทยศาสตร์ มหาวิทยาลัยสงขลานครินทร์ ปีการศึกษา 2559 **Attitudes of Medical Students' at Prince of Songkla University (academic year 2016) Towards Alcohol and Substance Abusers**

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## บทคัดย่อ

**วัตถุประสงค์** ศึกษาทัศนคติของนักศึกษาแพทย์ต่อผู้ใช้เครื่องดื่มแอลกอฮอล์และสารเสพติดและปัจจัยที่เกี่ยวข้อง

**วัสดุและวิธีการ** เป็นการศึกษาแบบตัดขวาง เก็บข้อมูลในนักศึกษาแพทย์ มหาวิทยาลัยสงขลานครินทร์ ปีการศึกษา 2559 โดยใช้แบบสอบถามข้อมูลทั่วไป แบบสอบถามทัศนคติต่อผู้ใช้เครื่องดื่มแอลกอฮอล์และสารเสพติดจำนวน 10 ข้อ วิเคราะห์ข้อมูลทั่วไป ข้อมูลทัศนคติโดยใช้สถิติเชิงพรรณนา และวิเคราะห์ปัจจัยที่สัมพันธ์กับทัศนคติต่อผู้ใช้เครื่องดื่มแอลกอฮอล์และสารเสพติดโดยใช้การทดสอบ Chi-square และ logistic regression

**ผลการศึกษา** นักศึกษาแพทย์ 739 คน (ร้อยละ 70.1) ร่วมมือตอบแบบสอบถาม เป็นเพศหญิงร้อยละ 56.0 เป็นเพศชายร้อยละ 44.0 มีอายุเฉลี่ย 21.2 ปี ร้อยละ 79.1 ของนักศึกษาแพทย์มีทัศนคติแบ่งแยกต่อผู้ใช้เครื่องดื่มแอลกอฮอล์และสารเสพติดที่ต่ำ และมีทัศนคติด้านการยอมรับที่สูง ร้อยละ 81.9 ของนักศึกษาแพทย์รู้สึกว่าได้รับการเรียนการสอนในด้านการรักษาผู้ใช้เครื่องดื่มแอลกอฮอล์และสารเสพติดที่เพียงพอ ในขณะที่ร้อยละ 44.8 ของนักศึกษาแพทย์รู้สึกไม่เห็นด้วยว่ามีทรัพยากรที่เพียงพอต่อการรักษาผู้ใช้เครื่องดื่มแอลกอฮอล์และสารเสพติด

**สรุป** นักศึกษาแพทย์มีทัศนคติในเชิงบวกต่อผู้ใช้เครื่องดื่มแอลกอฮอล์และสารเสพติด แต่ครึ่งหนึ่งของนักศึกษาแพทย์มีมุมมองทางสังคมซึ่งส่งผลให้มีทัศนคติในเชิงลบ โดยทัศนคติในเชิงลบของบุคลากรทางสาธารณสุขจะลดความรู้สึกเสริมกำลังใจให้กับผู้ป่วยและส่งผลกระทบต่อการรักษา นักศึกษาแพทย์ส่วนใหญ่รู้สึกว่าได้รับการเรียนการสอนในการรักษาผู้ป่วยติดสารเสพติด ผู้วิจัยเสนอว่าการจัดการเรียนการสอนนักศึกษาแพทย์ควรมีบทบาทสำคัญในการให้การศึกษานักศึกษาแพทย์ในเรื่องการรักษาผู้ป่วยติดสารเสพติดในด้านกาย จิต สังคมและสร้างทัศนคติเชิงบวกต่อผู้ใช้เครื่องดื่มแอลกอฮอล์และสารเสพติด

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## ABSTRACT

**Objective :** To explore medical students' attitude towards alcohol and substance abusers and the associating factors

**Materials and methods :** This cross-sectional study surveyed Prince of Songkla University medical students in academic year 2016. Questionnaires collecting demographic data, which also included 10 questions regarding one's attitude toward alcohol and substance use, were used. We analyzed the data in order to describe the attitude of our subjects by means of descriptive statistics. The factors associated with alcohol use were analyzed using the Chi-square test and logistic regressions.

**Results :** Seven hundred and thirty-nine medical students completed the questionnaires (70% response rate). The participants were 56% female and 44% male, and their mean age was 21.2 years. Approximately 79% of the medical students had minimal discriminative scores and high acceptance scores toward substance abusers. Eighty-two percent of them felt they had received sufficient training in the management of substance abuse, whereas 45% did not agree that they had enough resources to deal with substance abusers.

**Conclusion :** Our medical students had a positive attitude toward alcohol and substance abusers, but about half of them had a negative social perspective toward them. Such negative attitudes by health professionals damage both the patients' sense of empowerment and subsequent treatment outcomes. Nevertheless, they felt they had enough training in the management of conditions afflicting substance abusers. We suggest that the medical school curriculum should play a particularly important role in the education of medical students in terms of offering a biopsychosocial care and positive attitude to substance abusers.

**Keywords :** substance abuser, alcohol, medical students, prevalence, attitude

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## Introduction

Healthcare professionals are crucial in the identification and accessibility to treatment for people with substance abuse.<sup>1,2</sup> A multicenter study from Europe in 2011 used The Medical Condition Regard Scale to measure one's regards toward working with different patient groups and found that health professionals were regard to working with alcohol users (mean score: 45.35; 95% CI: 44.76, 45.95) and drug users (mean score: 43.67; 95% CI: 42.98, 44.36) lower than other patient groups, particularly in primary care; the effect is larger in some countries than others.<sup>3</sup> Most physicians do not feel competent to treat alcohol and drug-related disorders. They do not like to work with patients with these disorders or find treating them rewarding<sup>2-5</sup> and generally have a negative attitude towards patients with substance-use disorders.<sup>5,6</sup> They perceive violence, manipulation, and poor motivation as impeding factors in the healthcare delivery for these patients.<sup>1</sup> Alcohol and drug-related disorders are generally considered outside medical education.<sup>4</sup> Consequently, health professionals often lack adequate education, training and the necessary support structures to work with this patient group.<sup>1</sup>

The negative attitudes of health professionals diminish the patients' feelings of empowerment as well as harm the subsequent treatment outcomes.<sup>1,6-9</sup> From 1978 through 1982, medical students' attitudes toward substance abuse and its treatment showed a positive change. Furthermore,

one's personal experience with alcohol and other drugs has been shown to have an influence on such attitude improvements.<sup>10-12</sup> According to a previous study, medical curriculum programs that aim to positively influence future health professionals' perception and attitude toward such disorders and the patients that suffer from them can improve medical students' attitudes toward substance-abuse patients and their treatment.<sup>13,14</sup> They reported significant positive feeling changes, getting less upset when encountering alcoholics, hard-drug abusers, soft-drug abusers and compulsive smokers, as well as having a more positive view of the physician's role in the treatment of substance dependence.<sup>13</sup> Positive attitudes towards patients with drug- and alcohol-related problems may be the key to overcoming the difficulties experienced in the treatment of such patients.<sup>15</sup>

The medical students' attitudes and their ability to learn about alcohol- and drug-related disorders will be useful information for medical educator to develop better educational programs and propose recommendations for designing an effective medical school curriculum in order to avoid poor attitudes and deficient skills among our medical students.

## Objective

1. To explore the medical students' attitudes towards alcohol and substance abusers
2. To study the associated factors of the medical students' attitudes towards alcohol and substance abusers

## Materials and Methods

### Ethical consideration

This study was approved by the Ethics Committee of the Faculty of Medicine, Prince of Songkla University (REC: 59-391-03-4).

### Study design

This was a cross-sectional study conducted in order to survey the data of medical students from March to June 2017 (academic year 2016).

### Population

Our target population consisted of 1,055 medical students categorized by academic year as follows: 194 students from the 1<sup>st</sup> year; 176 from the 2<sup>nd</sup> year; 190 from the 3<sup>rd</sup> and 5<sup>th</sup> year, respectively; 133 from the 4<sup>th</sup> year; and 172 from the 6<sup>th</sup> year.

### Inclusion and exclusion criteria

The inclusion criterion was being a medical student who was studying in the Faculty of Medicine, Prince of Songkla University during 2017.

### Methodology

A research assistant contacted the medical students in class, assured them that their identities would be protected, and that they retained the right to withdraw from the research at any time. The students considered whether to participate in the study or not then the research assistant distributed the self-rating questionnaires to students that agreed to participate. There were 2 options for submitting the questionnaire—placing it in the wrapped box at the front of the classroom or dropping it in a wrapped box located at the Psychiatry Department at a later time. Thus, participant confidentiality was protected.

## Instruments

The questionnaire comprised 2 parts: 1) demographic characteristics like age, academic year, religious affiliation, cumulative GPA, hometown, parental marital status, income, and underlying diseases; 2) attitude toward alcohol and substance use consisting of 10 questions to assess the health professional's discrimination, acceptance, attitude and training concerning substance abusers<sup>16</sup>. The first question assessed discrimination, questions 2-4 assessed acceptance, 5-8 assessed attitude, and 9-10 assessed training. Each question had a 4-point rating scale—strongly disagree, disagree, agree and strongly agree.

### Statistical analysis

The data concerning demographic characteristics, and the attitude towards alcohol and substance abusers were analyzed in order to describe the attitudes of the sample using the descriptive statistical method. The results were presented as a frequency, percentage, average, standard deviation, median and interquartile range. The factors associating with attitude toward alcohol and substance abuse were analyzed using the Chi-square test and logistic regressions.

## Results

### Demographic data

The total number of medical students participating in this study was 739, and the response rate was 70.1%. Among the participants, there were 414 females (56.0%) and 325 males (44.0%). The mean age was  $21.2 \pm 1.9$  years, and the mean GPA was  $3.5 \pm 0.3$  (Table 1).

**Table 1** Demographic characteristics (n = 739)

Demographic characteristics	Number (%)
<b>Gender</b>	
Male	325 (44.0)
Female	414 (56.0)
<b>Age (years)</b>	
Mean ± SD (min-max)	21.2 ± 1.91 (18-28)
<b>Academic year</b>	
1	175 (23.7)
2	149 (20.2)
3	103 (13.9)
4	123 (16.6)
5	88 (11.9)
6	101 (13.7)
<b>Religion</b>	
Buddhism	648 (87.7)
Islam	43 (5.8)
Christianity	16 (2.2)
Other	7 (0.9)
No answer	25 (3.4)
<b>Cumulative GPA</b>	
Mean ± SD (min-max)	3.4 ± 0.33 (2.1-4.0)
2.00-3.00	83 (11.2)
3.01-3.50	228 (30.9)
3.51-4.00	254 (34.4)
No answer	174 (23.5)
<b>Home province</b>	
Songkhla	288 (39.0)
Other	434 (58.7)
No answer	17 (2.3)
<b>Parental marital status</b>	
Married	647 (87.6)
Divorced	26 (3.5)
Separated	19 (2.6)
Father or mother passed away	43 (5.8)
No answer	4 (0.5)
<b>Income (Baht/per month)</b>	
Median (IQR)	8000 (6000-10000)
<b>Underlying disease</b>	
No	637 (86.2)
Yes	93 (12.6)
No answer	9 (1.2)

Demographic characteristics	Number (%)
<b>Type of underlying disease (answer more than 1)</b>	
Respiratory disease	67 (72.0)
Endocrine disease	5 (5.4)
Gastrointestinal disease	5 (5.4)
Psychiatric disease	5 (5.4)
Skin disease	2 (2.2)
Other	12 (12.9)

SD = standard deviation

IQR= interquartile range

GPA = grade point average

### Attitude toward substance abusers

#### 1) Discrimination statement

The medical students had a low level of discrimination against alcohol and substance abusers; 79.1% of them answered disagree and strongly disagree to the statement, "You feel it is not worthwhile for you to serve drug users." This attitude correlated with gender ( $p = 0.001$ ) 59.5% of students who answered disagree and strongly disagree was female.

#### 2) Acceptance statement

Approximately 79% of the students responded disagree and strongly disagree to the statement, "When a drug user asks you for help, you will take the initiative to care for him/her." Once more, this attitude was correlated to gender ( $p < 0.001$ ) and having consumed alcohol for at least 1 year ( $p = 0.043$ ); 61.3% of students who disagreed and strongly disagreed with this statement was female, and 51.5% of those who responded disagree and strongly disagree was alcohol consumers for at least 1 year.

Eighty-nine percent of the students disagreed and strongly disagreed with the statement, "You feel you have a right to refuse to serve drug users." A gender correlation was observed here as well ( $p < 0.001$ ) because 59.9% of the respondents that disagreed and strongly disagreed with this statement was female.

Finally, 82.8% of medical students reported that they disagreed and strongly disagreed with the statement, "If you had the choice, you would not serve drug users." This attitude correlated with both gender ( $p = 0.001$ ) and academic year of study ( $p = 0.002$ ). Females comprised 59.5% of the students who responded disagree and strongly disagree, and another 60.8% of those who disagreed and strongly disagreed was years 1-3 of medical students.

### 3) Attitude statement

Eighty-six percent of the students agreed or strongly agreed with the statement, "These patients can be salvaged and provide a meaningful contribution to the society." Meanwhile, 63.8% either disagreed or strongly disagreed with the statement, "These patients over utilize healthcare resources and provide nothing in

return." Approximately, 52% of our students responded agree/strongly agree to the statement, "These patients have challenging medical and social issues from which I learn." Additionally, the 61.3% of them reported they disagreed or strongly disagreed with the statement, "The care of other patients suffers because of time, care, and resources spent on these patients." None of these statements was associated with other factors.

### 4) Training statement

Approximately 82% of the students agreed or strongly agreed with the statement, "In your clinical training, the management of the psychological, medical and social complications of substance misuse was addressed." This attitude correlated with gender ( $p = 0.004$ )—58.9% of those who responded disagree and strongly disagree was female.

Lastly, 55.2% of the respondents answered disagree or strongly disagree to the question, "Do you feel you have sufficient resources at your disposal to deal with problems related to tobacco, alcohol and illicit drug use." This statement was not correlated to other factors.

**Table 2** Attitude toward alcohol and substance use (n = 728)

Question	Medical student	Disagree/strongly disagree (%)	Agree/strongly agree (%)
<b>Discrimination</b>			
1. You feel it is not worthwhile for you to serve drug users.	year 1-3	79.5	20.5
	year 4-6	78.6	21.4
	Total	79.1	20.9
<b>Acceptance</b>			
2. When a drug user asks you for helps, you will take the initiative to care for him/her.	year 1-3	78.3	21.7
	year 4-6	79.5	20.5
	Total	78.9	21.1
3. You feel you have the right to refuse to serve drug users.	year 1-3	90.5	9.5
	year 4-6	87.5	12.5
	Total	89.3	10.7
4. If you had the choice, you would not serve drug users.	year 1-3	86.5	13.5
	year 4-6	77.6	22.4
	Total	82.8	17.1
<b>Attitude</b>			
5. These patients can be salvaged and provide a meaningful contribution to the society.	year 1-3	11.9	88.1
	year 4-6	16.5	83.5
	Total	14.3	85.7
6. These patients over utilize healthcare resources and provide nothing in return.	year 1-3	66.1	33.9
	year 4-6	60.5	39.5
	Total	63.8	36.2
7. These patients have challenging medical and social issues from which I can learn.	year 1-3	48.6	51.4
	year 4-6	46.1	53.9
	Total	47.6	52.4
8. The care of other patients suffers because of the time, care, and resources spent on these patients.	year 1-3	61.6	38.4
	year 4-6	60.9	39.1
	Total	61.3	38.7
<b>Training</b>			
9. In your clinical training, did the training the management of the psychological, and social complications of substance misuse?	year 1-3	18.5	81.5
	year 4-6	15.4	84.6
	Total	18.1	81.9
10. Do you feel you have sufficient resources to deal with health problems related to tobacco, alcohol and illicit drug use?	year 1-3	53.9	46.1
	year 4-6	55.7	44.3
	Total	55.2	44.8

Table 3 Association between general characteristics and attitude towards drinking (n = 728)

General characteristics	Disagree/strongly disagree	Agree/strongly agree	Chi-square P-value
1. You feel it is not worthwhile for you to serve drug users			0
Gender			0.001
Male	233 (40.5)	84 (55.3)	
Female	343 (59.5)	68 (44.7)	
2. When a drug user asks you for help, take the initiative to care for him/her.			<
Gender			<0.001
Male	222 (38.7)	94 (61.0)	
Female	351 (61.3)	60 (39.0)	
Have you consumed alcohol during the past year?			0.043
No	278 (48.5)	60 (39.0)	
Yes	295 (51.5)	94 (61.0)	
3. You feel you have the right to refuse to serve drug users.			<
Gender			<0.001
Male	260 (40.1)	55 (70.5)	
Female	388 (59.9)	23 (29.5)	
4. If you had the choice, you would not serve drug users.			0
Gender			0.001
Male	245 (40.7)	71 (56.8)	
Female	357 (59.3)	54 (43.2)	
Academic year			0.002
1 <sup>st</sup> - 3 <sup>rd</sup> year of medical school	366 (60.8)	57 (45.6)	
4 <sup>th</sup> - 6 <sup>th</sup> year of medical school	236 (39.2)	68 (54.4)	
9. In your clinical training, was the management of the psychological, and social complication of substance misuse addressed adequately?			0
Gender			0.004
Male	69 (55.6)	245 (41.1)	
Female	55 (44.4)	351 (58.9)	



## Discussion

This study showed that the PSU medical students enrolled during 2017 had a low level of discrimination and a high level of acceptance toward substance abusers. Comparing with the study from Pace University in 2014, the scores regarding the level of discrimination and acceptance were the same<sup>16</sup>. In Taiwan, a 2010 study on healthcare workers' attitude toward HIV/AIDS patients and drug users found the mean scores for the level of acceptance were similar, indicating that healthcare workers in Taiwan accepted HIV/AIDS patients and drug users in a similar manner<sup>17</sup>.

This study found that most of our medical students had a positive attitude toward substance-abuse patients as evidenced by their responses to the statements, "These patients can be salvaged and provide meaningful contribution to the society" and "These patients over utilize healthcare resources and provide nothing in return." This finding was the same as those from prior studies such as the ones from Pace University in 2014<sup>16</sup> and the University of Connecticut in 2006<sup>18</sup>. Moreover, 52.4% of our students harbored a negative attitude according to their responses to the statement, "These patients have challenging medical and social issues from which I learn." However, this proportion was much lower than that reported by the 2014 Pace University study (90%)<sup>18</sup>. Similarly, the 2006 University of Connecticut study among residency-training physicians found that 88.0% of their residents had a negative attitude<sup>20</sup>. The reasons for the lower rate of negative attitudes in

this study might be that our medical students had both social perspective and professional attitude toward substance abuser. Health professionals' perceptions of substance-dependent individuals were influenced by society's biased conceptions and perceptions of different substance abusers<sup>21</sup>. Then the medical students might had awareness of their society's biased to the patients and when they were in professional role they had been trained to had a positive attitude toward patients. So the most of them had positive attitude toward substance abusers.

A previous study from London (2005) reported that, in terms of the management of complications of substance misuse, 55.1 % of health professionals underwent training in the management of medical complications, 48.5% received training in the management of psychological complications, and 47.8% were trained how to manage social complications<sup>20</sup>. Meanwhile in this study, 81.9% of medical students thought that they received enough training in the management of the psychological, medical and social complications related to substance misuse because in PSU medical school, 4<sup>th</sup>-6<sup>th</sup> year medical students had engagement in patient care team and had experience in management patient in biopsychosocial model that made them understand and had positive attitude toward substance abuser.

This study also found that 44.8% of medical students thought that they had enough resources at their disposal to deal with substance abusers. Our study found a higher prevalence of positive

attitudes toward alcohol and substance abusers than the 2005 London study, which reported that 32.4 % of health professionals thought they had enough resources to deal with health problem related to the use of illicit drugs<sup>20</sup>. Nevertheless, most of our medical students thought that they did not have enough resources at their disposal for the proper management of such problems. Although PSU medical school curriculum regarding the biopsychosocial care of substance abusers, our findings suggest that more resources should be focused on teaching medical students the key issues in substance misuse.

#### Limitations

The cross-sectional design of this study limited the results because cause-effective could not be inferred. Furthermore, the sample population was from a single university; consequently, its results cannot be generalized to another area or a different culture. Including medical students from other universities in further studies may be required in order to strengthen the validity of the findings.

#### Implications and future recommendations

Multicenter studies should be conducted by medical schools in order to compare the differences between areas with different cultures.

#### Conclusion

The PSU medical students had an overall positive attitude toward substance-abuse patients; however, about half of them reflected the negative attitude of broader social perspective toward them. Negative attitudes of health professionals diminish the patients' feelings of empowerment as well as

the subsequent treatment outcomes. Nevertheless, when compared to prior studies, they felt they had enough training in the management of conditions afflicting substance abusers. Hence, the medical school curriculum plays a particularly important role in the education of medical students in terms of offering a high standard of biopsychosocial care to substance abusers.

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