

PREVALENCE AND RELATED FACTORS OF DEPRESSION IN BUDDHIST MONKS IN PHRA NAKHON SI AYUTTHAYA

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Abstract

Depression is a widespread and serious medical illness that negatively affects physical and mental conditions causing emotional and social malfunctions. Social factors are considered a significant cause of depression; however, the prevalence and related factors of depression in specific populations, such as Buddhist monks, remains unclear. Therefore, this study was aimed at investigating the prevalence and related factors of depression specifically in Buddhist monks. This study was a descriptive study of 416 Buddhist monks who lived in temples located in Phra Nakhon Si Ayutthaya District, Phra Nakhon Si Ayutthaya Province in Thailand, for a period from August 1, 2013 to November 30, 2013 using interviews and physical examinations. Research instruments included a questionnaire for demographic data and the Thai version of the Patient Health Questionnaire (PHQ-9). Data were analysed using descriptive statistics, including the Chi square test, Fisher's exact test, paired T-test, and multiple logistic regressions ($p < 0.05$). The results revealed that the prevalence of depression in Buddhist monks in Phra Nakhon Si Ayutthaya District was 20.43% divided into mild, moderate, and severe depression accounting for 17.79%, 2.16%, and 0.48%, respectively. Statistically significant factors related to depression were the educational levels before ordination in uneducated Buddhist monks (AOR 4.77, 95% CI 1.35-16.81) and the previous history of psychiatric disorders (AOR 11.34, 95% CI 2.14-60.02). It could be concluded that it is still necessary to promote mental health to prevent and minimize depression in Buddhist monks. In addition, healthcare providers should emphasize promoting mental health in Buddhist monks so that they can be spiritual assistants for the people.

Keywords: Prevalence, depression, Buddhist monks

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Introduction

Depression is a common illness in medical practices and is often overlooked (Lotrakul, 2006). Many patients cannot recognize that they are depressed and, thus, some patients see a physician with complaints of physical symptoms such as tiredness, poor appetite, or insomnia. Depression is an emotional disorder mainly characterized by severity from mild to severe symptoms, which can lead to physical and mental problems, as well as impairments in the thinking process and social malfunctions (American Psychiatric Association, 2000).

Depression is the sum of mental and social causes, including a change in chemicals in the brain. Most people with depression often have chronic and recurrent symptoms. According to a study of depression in Thai people, their lifestyle and culture affect the symptoms of depression (Jirawatkul *et al.*, 1999).

Thailand is a country with a large Buddhist population accounting for 95% of its total population (National Statistical Office, 2011). According to the data from the National Buddhism Office as of December 31, 2012 (National Buddhism Office, 2014), there were 293,879 Buddhist monks in Thailand. The Buddhist disciplines specify that Buddhist monks are considered effectively as secularly deceased beings that have no family to care for, live in a plain way, and refrain from the various entertainments used to relieve stress and sadness. Buddhist monks live only in a temple and cannot receive any support from their family or other people for participating in activities in daily life. These restraints are classified as social risk factors that cause depression.

With the large population of Buddhist monks in Thailand, depression in Buddhist monks potentially causes a high morbidity and mortality rate. One important factor in the successful resolution of depression is the study and understanding of the disease in the Thai context, especially in specific populations such as Buddhist monks, who are a large but overlooked group of the population.

Objective

The objective of the research was to evaluate and determine the prevalence and related factors of depression in Buddhist monks in Phra Nakhon Si Ayutthaya District, Phra Nakhon Si Ayutthaya Province.

Related Concepts, Theories, Frameworks, and Studies

There are several theories that explain the causes of depression, such as the biochemical theory (Krishnan and Nestler, 2008), genetic theory (Levinson, 2006), and social theory (Brown and Harris, 1978). Social theory suggests that depression is a response to environmental conditions and learning experiences based on the following 3 foundations:

1. Provoking agents, such as important and severe events in life;
2. Vulnerable factors, such as genes and neurotransmitter levels in the brain; and
3. Symptom formulation factors, such as living environments and economic and social conditions.

It is interesting to consider whether the lifestyle of Buddhist monks, who are required to deal with social and practical conditions within a strict framework, affects the prevalence of depression differently from other populations.

According to the research by Knox *et al.* (2002), who investigated 500 Roman Catholic priests, the prevalence of depression in these priests was higher than that of the general population in the United States (Kessler *et al.*, 2003). According to the previous study, it was found that statistically significant factors relating to their depression included low vocational satisfaction and low social support. Low vocational support, especially, was the main related factor of depression in the catholic priests.

From reviewing the available literature, there are 2 studies that examined the prevalence and related factors of depression in

Buddhist monks in Thailand. Firstly, Juthamas *et al.* (2016) investigated the factors affecting depression in ill Buddhist monks who were treated in the outpatient department, Priest Hospital, Bangkok (Kosiyakul and Saiboonsri, 2011). It was a hospital-based analytical study and its samples were 105 Buddhist monks aged between 20 and 80 years old. Some researchers have found that significant related factors are the relationship with others, the relationship with nearby communities, and stress from temple administration Verma and Araya (2010).

Secondly, Sriwilas (2010) studied the related factors of depression in 214 Buddhist monks aged 60 years old or more in Bangkok and suggested that the prevalence of depression was higher than that in the general population. The related factors of depression in the Buddhist monks that were underlying the disease were the ordained age under 50 years of age and temple administrative status.

The research question of this study is how depression is caused among the monks. Researchers were interested in investigating the prevalence and related factors of depression in Buddhist monks in a different social context from the above-mentioned studies and therefore decided to examine the prevalence of depression in Buddhist monks in temples located specifically in Phra Nakhon Si Ayutthaya District, which is an area outside of Bangkok. This research was a community-based study which was different from the settings of previous studies and was aimed at fulfilling the gap in knowledge of this phenomenon.

Methodology

Research Design

This research was a total survey study of the whole population in the area without random selection.

Population and Sample Characteristics

Inclusion Criteria

1. Buddhist monks; and

2. Monks living in temples located in Phra Nakhon Si Ayutthaya District, Phra Nakhon Si Ayutthaya Province.

Exclusion Criteria

1. Monks who could not read and write the Thai language; and
2. Monks who did not voluntarily participate in the research.

Research Period

Data were collected from August 1, 2013 to November 30, 2013, which was during the Buddhist Lent period when most Buddhist monks are in their temples and do not leave their areas.

Research Instruments

The evaluation form allowed the participants to answer questions by themselves and consisted of 2 parts:

Demographic Data

The Thai version of the Patient Health Questionnaire (PHQ-9), which is a self-report questionnaire using the 9 questions from the DSM IV diagnosis criteria of major depression; and the rating scale of each question is 0-3 points that relate to the severity of the symptoms. Then, a score of 9 points or more fulfills the diagnosis of major depression (sensitivity = 0.84 and specificity = 0.77).

Data Collection

The researchers collected the data from all Buddhist monks at 78 temples. These monks were informed about this research and how to complete the evaluation form, as well as being asked to give their consent by signing the research participation form.

After collecting the assessment forms and checking the accuracy of the data, the results were then recorded into a computer system in Excel file format.

Data Analysis

Data was analyzed using SPSS Statistics version 17.0 to calculate and analyse various data through the following statistics:

1) Descriptive statistics, including number, percentage, mean, standard deviation, median, minimum, and maximum to indicate the general information of the participants;

2) Chi-square test or Fisher's exact test to compare the group-based simple characteristics; and

3) Multiple logistic regressions used to identify factors related to depression.

Rights Protection and Research Ethics

This research was approved for ethical certification by the Institutional Review Board of the Royal Thai Army Medical Department number IRB / RTA 1104/2556.

Participants could refuse and/or leave this research at any time. The data in the evaluation forms was kept confidential without specifying the name of the participants in the document. When the participants completed their evaluation form, it was sealed in a dense envelope by themselves before being returned to the researchers.

Results

The total number of Buddhist monks participating in this study was 422 and 416 of those completed their questionnaires correctly, accounting for 98.58%. Tables 1 and 2 show the general characteristics of the participants. The assessment of the Thai version of the Patient Health Questionnaire (PHQ-9) classified by diagnosis showed that most of the Buddhist monks either have minor symptoms that do not meet major depression criteria (42.79%) or have no symptoms (36.78%).

Moreover, the relationships between factors related to depression in Buddhist

monks were examined by comparing those without depression or with minor symptoms that do not meet major depression criteria with those diagnosed with major depression. Significant statistics were presented that there is a relationship between the histories of psychiatric disorders and the history of psychiatric disorders in the family to depression in Buddhist monks ($p < 0.05$).

Discussions

As shown in Table 3, the prevalence of depression in Buddhist monks from this research was 20.43%, which is similar to the study by Knox *et al.* (2002), who found that the prevalence of depression in Roman Catholic priests was 20%. A study by Siriwanarangsana *et al.* (2004), investigating 11700 males and females aged 15-59 years throughout Thailand suggested that the prevalence of major depressive disorders in the male population was 2.5%; by comparison, this research indicates that the prevalence of depression in Buddhist monks was significantly higher than that of the general population.

Buddhist monks who had no education before ordination were 4.77 times more likely to have depression than those who had an education higher than secondary school level (adjusted odds ratio (AOR) 4.77, 95% confidence interval (CI): (1.35-16.81), P -value 0.015). This is consistent with the Department of Mental Health (2009, 2010) suggesting that success in education is a protective factor from depression; therefore, those who have no education are regarded as lacking such protective factor.

As shown in Table 4, Buddhist monks with a history of psychiatric disorders were

Table 1. General characteristics of Buddhist monks in temples located in Phra Na Khon Si Ayutthaya District, Phra Nakhon Si Ayutthaya Province, classified as mean, standard deviation, median, minimum, and maximum

General characteristics	Mean±SD	Median(Min-Max)
Age (years)	40.83±16.60	37(20-84)
Years of ordination	8.29±9.94	4(0-57)
Start of ordination (age)	32.53±14.00	27(19-74)

11.34 times more likely to have depression than those with no history of psychiatric disorders (AOR 11.34, 95% CI 2.14-60.02, *P*-value 0.004). This is also consistent with the Department of Mental Health (2009, 2010) and Kittirattanapaiboon *et al.* (2013) suggesting that psychiatric patients often experience other psychiatric comorbidities as well.

before ordination and previous history of psychiatric disorders.

This research was a pilot study that could be further used as a framework for other studies to find ways to promote mental health in order to prevent and reduce depression in Buddhist monks as spiritual assistants for the people.

Summary and Suggestions

The prevalence of depression in Buddhist monks in Phra Nakhon Si Ayutthaya District, Phra Nakhon Si Ayutthaya, was 20.43% and statistically significant factors relating to this depression included the educational level

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Table 2. General characteristics of Buddhist monks in temples located in Phra Nakhon Si Ayutthaya District, Phra Nakhon Si Ayutthaya Province, classified as number and percentage

General characteristics	Number (person)	%
Marital status before ordination		
Single	294	70.67
Married	75	18.03
Divorced	27	6.49
Widowed	20	4.81
Highest educational level before ordination		
No education	13	3.13
Primary school	120	28.85
Secondary school	161	38.70
Higher than Secondary school	122	29.32
Ruling position		
No	372	89.42
Yes	44	10.58
Ecclesiastical education		
No	66	15.87
Dharma scholar in intermediate level	285	68.50
Dharma scholar in highest level	65	15.63
Occupation before ordination		
No occupation	161	38.70
Working	255	61.30
Comorbidities		
No	306	73.56
Yes	110	26.44
History of psychiatric disorders		
No	408	98.08
Yes	8	1.92
History of psychiatric disorders in family		
No	409	98.32
Yes	7	1.68

Table 3. Assessment of the Thai version of the Patient Health Questionnaire (PHQ-9) classified by diagnosis

Diagnosis	Number (person)	%
No symptoms	153	36.78
Minor symptoms that do not meet major depression criteria	178	42.79
Major depression, mild	74	17.79
Major depression, moderate	9	2.16
Major depression, severe	2	0.48
Major depression (Total)	85	20.43

Table 4. Relationships between factors related to depression in Buddhist monks by comparing those without depression or minor symptoms that do not meet major depression criteria with those diagnosed with major depression (using multiple logistic regression)

Multivariate analysis	Mild symptom n (%)	Major depressive disorder n (%)	Crude odds ratio (95%CI)	Adjusted odds ratio (95%CI)	p-value
Marital status before ordination					
Single	240(81.63)	54(18.37)	1	1	
Married	53(70.67)	22(29.33)	1.84(1.03-3.29)	1.62(0.85-3.1)	0.146
Divorced/widowed	38(80.85)	9(19.15)	1.05(0.48-2.31)	0.84(0.35-1.99)	0.684
Educational level					
No education	6(46.15)	7(53.85)	5.61(1.71-18.4)	4.77(1.35-16.81)	0.015
Primary school	95(79.17)	25(20.83)	1.27(0.66-2.41)	1.04(0.51-2.11)	0.918
Secondary school	129(80.12)	32(19.88)	1.19(0.65-2.19)	1.16(0.62-2.16)	0.652
Higher than secondary school	101(82.79)	21(17.21)	1	1	
Underlying disease					
No	250(81.7)	56(18.3)	1	1	
Yes	81(73.64)	29(26.36)	1.60(0.96-2.67)	1.47(0.85-2.55)	0.174
History of psychiatric disorders					
No	329(80.64)	79(19.36)	1	1	
Yes	2(25)	6(75)	12.49(2.47-63.07)	11.34(2.14-60.02)	0.004
History of psychiatric disorders in family					
No	327(79.95)	82(20.05)	1	1	
Yes	4(57.14)	3(42.86)	2.99(0.66-13.63)	1.96(0.35-10.93)	0.445
Multiple logistic regression				Significant at $p < 0.05$	

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