PREVALENCE OF AND FACTORS ASSOCIATED WITH DEPRESSION IN THAI ADULT GENERAL OPD PATIENTS AT PHANOMPHRAI HOSPITAL, ROI-ET PROVINCE, THAILAND

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ABSTRACT:

OBJECTIVE: To explore the prevalence and determine the factors related to depression in Thai adult general OPD patients at Phanomphrai hospital.

MEYHOD: A cross-sectional study was carried out among Thai adult general OPD patients at Phanomphrai hospital, age 18-59 years. 425 patients were asked to complete a structure face-to-face interview assessing several variables. The PRQ85, life stress event, and HRSR Scale were used to evaluate social support, stress life events, and depression. The variables were determined by percentage, mean, standard deviation, Chi-square, independent t-test, and Pearson Correlation.

RESULTS: The prevalence of depression was 11.5% (mild to moderate 8.0% severe 3.5%). Marital status, family member living with, and history of depression was statistically significant related with depression ($p<0.001$), gender, occupation, and depression in family was statistically significant related with depression ($p<0.05$). Social support was statistically significant negative correlated with depression (r = -.647, $p<0.001$). Stress in life was statistically significant positive correlated with depression (r = .648, $p<0.001$).

CONCLUSION: Disrupted marriage, psychosocial factors, and history of depression were found to have high relationship with depression. Scrupulous diagnosis for depressed subjects, special taking care of vulnerable group, education, and appropriate activities for reducing risk factors to depression are recommended to improve quality of life among Phanomphrai people.

Keywords: Thai adult general OPD Patients, Phanomphrai hospital, ROI-ET, Thailand, Depression

INTRODUCTION: Depression is a common mental disorder characterized by sadness, loss of interest in activities and by decreased energy[1]. It is a significant public health problem because it is relatively common and its recurrent nature profoundly disrupts patients' lives[1]. At its worst, depression can lead to suicide, a tragic fatality associated with the loss of about 850,000 thousand lives every year[2]. A projection of depression occurrences in developing countries suggests that, by the year 2020, it will be the number one ranking disease[3]. The prevalence of depression was particularly high in studies conducted in developing countries[4]. In Thailand, depression is often undiagnosed although it is ranked by the Thai Ministry of Public Health as being the 4th most prominent disease in Thailand. Approximately 5% or over 3 million Thai people suffer from this disease. (5) Rural adults in health care sector are one of the most risky group to get depression due to a greater likelihood of heavy alcohol consumption, and increased poverty[6]. However, little is known about this population[6]. This study was conducted in order to prevent the adverse outcomes of depression in Phanomphrai. The objectives of this study were to explore the prevalence and determine the factors related to depression in Thai adult general OPD patients at Phanomphrai hospital.

MATERIALS AND METHODS: A cross-sectional study was carried out among Thai adult general OPD patients at Phanomphrai hospital, Roi-Et Province, Thailand. The inclusion criteria were aged 18-59 years, had been living in Phanomphrai

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district, Roi-Et province for at least six months, could communicate in Thai, and were willing to participate in the research. The exclusion criteria were those who are seeking the general physician for other purposes such as an annual health check-up, vaccination and seeking a doctor's certificate. patients were asked to complete a structure face-to-face interview assessing general information, social support, stress events, and depression.

Personal Resource Questionnaire (PRQ85) Part 2 was used to evaluate social support. It contains 25 items. Each item response was scored on a 7-point Likert scale, with scores ranging from 25-175; higher scores indicated higher levels of perceived social support. The questionnaire was pre-tested before actual data collection. Cronbach's α was 0.71.

Stressful life events was used to evaluate stress events in the past one year. It contains 43 items. Each item response has its own score according to its severity, score ranging from 0.00-342.02; higher scores indicated higher levels of stress events.

Health Report (HRSR) Scale: The Diagnostic Screening Test for Depression in Thai Population was used to evaluate depression. Score ranging from 0-60; score 0-24 indicated no depression, 25-29 indicated mild to moderate depression and 30 or more indicated severe depression.

Subjects were selected by a systematic random sampling method. For data collection, interviewers were trained to administer the interview in a standardized procedure. The data abstraction and interview forms were checked for completeness.

Frequency, percentage, mean, standard deviation, Chi-square test, Independent t-test and Pearson's Correlation Coefficient in SPSS v 17 were used to analyze data. Prior to starting data collection, this study was reviewed and approved by the Ethics Committee for Researchs on Human Subjects, College of Public Health Sciences, Chulalongkorn University, Thailand.

RESULTS: All samples were Buddhism. There were female more than males (52.2% vs. 47.8%), mean age was 43.93 years old (SD 11.39). In terms of marital status, most samples were married (84%). Regarding education level, most samples had finished primary school (47.8%), Of the 425 samples, 244 (57.2%) living with spouse, 183 (43.1%) were farmer. Most of the samples had monthly household income equal or less than 15,000 baht (67.8%), For health status of samples, 245 (57.6%) had no other medical illness and 311 (73.2%) didn't have family's medical illness, 415 (97.6%) had no depression in family and 418 (98.4%) had no history of depression, 239 (56.2%) never consumed alcohol and tobacco, and 132 (31.1%) come to hospital with disease in endocrine system (such as diabetes and hyperthyroidism).

Perceived social support The mean of social support score was 129.96, SD was 17.82, minimum score was 66, and maximum score was 166. There were patients who had social support score in medium level (score 112.14-147.78) 66.6%, low (score 66.00-112.13) 17.9%, and high (score 147.79-166.00) 15.5% respectively.

Stress life events The mean of score equal 39.37, SD was 22.09, minimum score was 0.00, and maximum score was 102.05. There were patients who had stress life events score in medium level (score 17.28-61.46) 69.6%, high (score 61.47-102.05) 17.9%, and low (score 0.00-17.27) 12.5% respectively.

Prevalence of depression 49 (11.5%) of samples were depressed, divided into mild to moderate depression 8% and severe depression 3.5%.

Factors related to depression Marital status, family member living with and history of depression was statistically significant related with depression ($p<0.001$), gender, occupation, and depression in family were statistically significant related with

depression (p<0.05). Concerning to psychosocial factors, social support and stress life events were statistically significant related with depression (p<0.001). Moreover, analysis by Pearson Correlation revealed high relationship between social support (r=-.647, p<0.001) and stress life events (r=.648, p<0.001) on depression.

Table 1: Personal factors related to depression (n=425)

Factors	No depression (%) / Depression (%)	χ^2	p-value
Gender		5.069	.024
Male	92.1% / 7.9%		
Female	85.1% / 14.9%		
Marital status		17.479	.000
Single	93.8% / 6.3%		
Married	89.4% / 10.6%		
Widowed, divorced, separated	60.0% / 40.0%		
Living with		33.420	.000
Spouse	91.4% / 8.6%		
Children	64.0% / 36.0%		
Others	91.5% / 8.5%		
Mixed	93.1% / 6.9%		
Occupation		7.923	.019
Farmer	83.6% / 16.4%		
Mixed	83.3% / 16.7%		
Others	92.4% / 7.6%		
Depression in family		*	.019
None	89.2% / 10.8%		
Have	60.0% / 40.0%		
History of depression		*	.000
None	89.7& / 10.3%		
Have	14.3% / 85.7%		

*Fisher's Exact Test

Table 2: Psychosocial factors related to depression (n=425)

Factors	No depression (%) / Depression (%)	χ^2	p-value
Social support		108.142	.000
Low	53.9%/46.1%		
Medium to high	96.0% / 4.0%		
Stress life events		85.371	.000
Low	46.9% / 6.1%		
Medium	94.6% / 5.4%		
High	57.9% / 42.1%		

DISCUSSIONS: From the study, prevalence of depression in 425 Thai adult general OPD patients at Phanomphrai hospital was 11.5% divided into mild to moderate depression 8% and severe depression 3.5%. Compared with studies conducted elsewhere, the prevalence of depression in health care center was about 2-40% [7-10]. The various trend of results depended on different personal factors, environment, society, culture, politics and the way of life including different sample size, data collection and depression tool.

In terms of marital status, a disrupted marriage (being divorced, separated, and widowed) could make people tended to get depression[11]. Regarding to family member living with, patients who lived with children had a trend to get depression more than patients who lived with others. It might be that most of patients who lived with their children only, often had some problems with their spouse. This result was consistent with several studies which found that a positive marital relationship can protect from depression, while long-lasting marital discord or conflicts can make individuals vulnerable to depression[12]. Patients who used to suffer from depression in the past tended to get depression more than patients who were never suffer from depression. It conformed with a study by American Psychiatric Association which demonstrated that the risk for developing a depressive episode was significantly higher in individuals with a prior history of depression[13]. Female patients got depression more than male. It is attributable to social role in women residents in the country and the amount of monoamine oxidase was more abundant in women, whose substance influences depression[14]. Patients who had more than one occupation tended to be depression more than others, which resembled to patients who were farmer. It conformed with one study indicated that low socioeconomic status (measured by the level of education, income or occupation) was related to depression[15]. Patients who had depressed members in their families tended to get depression more than patients who had none depressed members in their families, which is consistent with previous study[16]. Personal monthly income, having a more direct adverse psychological effect towards the depressed, which might attribute to no relationship between

household income and depression. However, Pearson Correlation shown correlation among household income and depression score same as several studies[17].

Social support statistically significant negative correlated with depression. The same result was found in many studies[7, 18]. Stress life events were statistically significant positive correlated with depression. This result was the same as a previous study[7].

There are many factors related to depression. However, depression tool in this study is just a screening tools, scrupulous diagnosis for depressed subjects is required. For management depression in this area, special taking care of vulnerable group, education, and appropriate activities for reducing risk factors to depression are recommended to improve quality of life among Phanomphrai people. Additionally, further studies such as comparison between adult patients in urban area and rural area, longitudinal studies, analytic studies which confounding factors are removed, should be done in order to build up understanding about risk factors and protective factors to depression.

ACKNOWLEDGEMENT: This research was supported by Phanomphrai Hospital, Roi-Et Province, Thailand.

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