J Med Biosci Vol. 6 No. 2 July - December 2024; 125 - 134 DOI: 10.14456/jmbs.2024.13

Original article

Depression, defense styles, and related factors of the elderly at Public Health Center 7 in Bangkok

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Abstract

Background: Depression is a common mental health problem among the elderly. The elderly are often faced with degeneration from the aging process and life crises. If they have limited capacities for adaptation or use inappropriate defensive styles that would lead to depression in the elderly.
Objectives: The study aimed to explore the prevalence of depression, defense styles, and related factors among the elderly in the senior club at Public Health Center 7 in Bangkok, Thailand.
Methods: Data were consecutively collected from 129 elderlies in the senior club at Public Health Center 7 in Bangkok. They were asked to complete the set of questionnaires, including; The defense styles questionnaire-60 (DSQ-60), the Thai geriatric depression scale (TGDS-30), the social activities participation of the elder, and the 1-year life event questionnaire, and Chula activities of daily living index (Chula ADL Index).
Results: Depression was found in 9.3% of the subjects. The most frequently utilized defensive styles were adaptive defense mechanisms, especially, altruism. These adaptive defense mechanisms also had a negative correlation with depression. Male gender, history of psychiatric disease, moderate dependency level of the instrumental activity of daily living (IADL), moderate to a high level of stress in the economy, high-stress level on the social facet, frequent use of passive-aggression or reaction formation defensive styles, and rarely using of sublimation could be statistically associated with depression for these samples.
Conclusion: The one-tenth proportion of the elderly in this study had depression, which is comparable to the previous reports. Almost all of them used adaptive defense styles which also decreased the risk of depression. Recent results from the related factors and promoting adaptive defensive styles would be helpful for the prevention of depression in caring for the elderly at the senior club.

Keywords: Defense styles, depression, elderly.

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Received: May 1, 2023
Revised: June 29, 2023
Accepted: July 24, 2023

Depression is a common mental health problem among the elderly around the globe. While the accurate prevalence of geriatric depression in Thailand has not been reported.The secondary data analysis from the Thailand health data center (THD) in 2021 showed that a total of 9,089 Thai patients aged 60 years and older had depressive disorder, which made the prevalence of depressive disorder among Thai elderly only 0.1%, and one–third of them had mild depression. [1] According to Booniam S, *et al* [2] found the elderly patients from four tertiary care hospitals in Thailand had mild depression. Also, major depressive disorder among them predicted suicidal ideation.

The elderly are usually at the end of their active life stage and become more dependent on others. They are also people who face more limitations in physical function from degenerative changes and poorer health conditions, impaired vision and hearing ability, memory, and other cognitive problems. All of these together with poor mobility because social isolation reduced social participation, and difficulty in performing activity of daily living (ADL) which can affect negative feelings such as sadness, loneliness, despair, and low self-esteem. Without proper management, this may increase the suicidal risk of depressed elderly. The etiology of depression for the elderly may be influenced by both internal and external factors such as biological, psychological, and social influences. [3, 4] It may be precipitated by various stressors and physical or psychological trauma. There were other predisposing risk factors such as mastery, aging cognition, negative self-image, past mental health conditions, rumination, personality, conflict, coping styles, personal attitudes, and beliefs. [3, 5, 6] Moreover, cognitive and executive function decline normally found in the aging process will enable the elderly to be more vulnerable to depression, when they encounter altered events in their life especially loneliness and social isolation. [7] Some depressed elderly minimize their sadness but they manifested several symptoms of behavioral changes such as eating problems, insomnia, complaints of weakness, and lack of concentration, which may produce the feeling of burden on family or major caregivers. According to Zenebe Y, *et al,* fifty percent of the elderly had depression without a diagnosis. [8]

Stress and anxiety are the results of conflict between the environment and internal psychological demands. Defense mechanisms and coping are utilized to reduce anxiety from these conflicts. Thus, individuals attempt to use some defense styles, which are the unconscious resources used by the ego, to protect themselves, maintain self-esteem, and reduce the pressure from stress and anxiety. [9] Individuals who used some specific defenses were related to psychiatric disorders, interpersonal problems, externalizing behaviors, a vulnerable sense of self, poor adjustment, suicidal ideation, and attempts. [10]

Experts assembled the defense styles according to their concepts. Freud A, [9] divides defense styles into three groups: mature defenses, neurotic defenses, and immature defenses. In addition, Thygesen KL,[11] clustered 30 defense styles into three groups following diagnostic and statistical manual of mental disorders fifth edition (DSM-IV); including image distorting defenses, affecting regulating defenses, and adaptive defenses. Image distorting and affecting regulating defenses are the immature defense styles, on the other hand, adaptive defense styles are the healthy and mature defense styles.

Depression may occur from the inappropriate cycles involving angry reactions to narcissistic injury and a compensatory idealization that triggers subsequent intense disappointment in self and others. [12] Therefore, higher neurotic, immature, pathological, and lower mature defense styles were associated with a psychosocial impairment that could be found among patients with depression. [13, 14] The study on the defense styles of depressed elderly is rare in recent years and the research is still limited in Thailand. Therefore, the present study aimed to investigate depression, defense styles, and the related factors among the elderly in Thailand. The results could be encouraging health providers to create guidelines or programs to protect the elderly from depression.

Materials and methods

Subjects

The current study was a cross-sectional descriptive design. Data collection was performed from June to July 2021. The research protocol was reviewed and approved by the Institutional review board, Faculty of Medicine, Chulalongkorn University (IRB no. 651/63)

The senior club at Public Health Center 7 located in the inner city of Bangkok that population has diversity. The sample size was 129 that calculated from Taro Yamane's formulation. The elderly from the senior club were screened by purposive sampling

and consecutively recruited in the study following the inclusion and exclusion criteria. The sample was the elderly aged 60 years and older and willing to participate in the study. Individuals with problems with communication, hearing, sighting, and severe cognitive impairment were excluded. All subjects were asked to give written consent before participating in this study. They were asked to complete the set of questionnaires including demographic and personal data, the defense style of questionnaire-60 (DSQ-60), Thai geriatric depression scale-30 (TGDS-30), Social activities participation of elderly, the 1-year life event question, and Chula ADL Index.

Measurements

Demographic and personal data were asked in two parts. The first part inquired about personal information including gender, marital status, education, income, major caregiver in family, e.g., children, spouse, sibling, or no one, health insurance, income rate before retirement, hobbies, type of attending activities in the senior club, and the use of social media. The second part was the questions about illness information including the history of substance use, underlying medical disease, and history of psychiatric disorder.

Defense style of questionnaire-60 (DSQ-60) comprised 60 items that covered 30 defense styles. [11] Each defense style was evaluated by two items. Respondents were asked to rate their defense styles on a 9-Likert scale. On average, each defense style ranged between 1 - 9. Average score was divided into two groups: those who score less than 4.5 was a low frequency of use and score 4.5 or more was a high frequency of use. Defense styles were divided into three groups: image-distorting defenses, affect-regulating defenses, and adaptive defenses. Cronbach's alpha coefficient for each group was 0.77, 0.73, and 0.74, respectively.

Thai geriatric depression scale-30 (TGDS-30) [4] is a 30 items self-rated questionnaire to evaluate depression among the elderly within the past one week. Respondents rated each item with two choices "Yes" or "No". Total scores ranged between 0 - 30 scores, 0 - 12 scores represented not depressed, 13 - 18 mild depression, 19 - 24 moderate depression, and 25 - 30 severe depression. The Cronbach's alpha coefficient was 0.93.

The social activities participation of the elderly was 10 items self–rate questionnaire This questionnaire was developed by Linsuwannont P. [15] Respondents rated their activities on a 5-Likert scale from 1 (never/not true) and 5 (always/true). Total scores ranged between 10 - 50 points. A total score below mean - 1 Standard Deviation (SD) was defined as low participation, a total score ranged between mean ± 1SD was moderate participation, and a total score higher than mean + 1SD was high social activities participation. Cronbach's alpha coefficient was 0.77.

The 1-year life event questionnaire assessed the life stress events within one year ago with 43-items, assessed for stress from health, family, economy, and social facet. Nakrapanich S. [16] developed the Thai language accordingly to Thai culture. Responded to each item with two choices "Yes" or "No". Total scores ranged between 10 - 50 points. Interpretation of the score divided life stress events into three levels by mean and SD. Cronbach's alpha coefficient was 0.99.

The Chula ADLS Index (CAI) assessed activities of daily living both basic (i.e., walking) and instrumental activities of daily living that developed into the Thai language by Jitapunkul S, *et al*. [17] The scores range from 0 to 9 were divided into three groups; scores 0 - 4 represented severe dependence, 5 - 8 moderate dependence, and 9 mild dependence or independence.

Statistical analysis

The collected data was analyzed on descriptive and inferential statistics by the statistical package for the social sciences (SPSS) program version 25. Data were expressed as mean ± standard deviation (SD). The Chi - square test, Pearson's correlation coefficient, and unpaired Student *t* - test were performed to demonstrate the associated factors to depression and defensive styles. Binary logistic regression was applied to explore the predictive factors of depression. A significant difference level was set at the level of $P < 0.05$.

Results

A total of 129 elderlies were recruited in this study. Most of them were female. Mean age was 70.6 years old. Fifty-seven percent of the sample were single, widowed, divorced, or separated. Mostly, 45.7% of the sample received support income from their spouse/children. Half of the subjects identified their children as the major caregiver in family. In all, 58.1% of the elderly spent their free time watching television

and 41.9% of them had friend meetings. 78.3% of the subject exercised regularly. 62.8% of them used social media regularly. LINE application was the most preferred application used for communication and maintaining the relationship with others. Three quarters of the sample had underlying medical diseases, e.g., hypertension, dyslipidemia, diabetes mellitus, osteoarthritis, heart disease, chronic kidney disease. Fifteen percent of the elderly reported themselves having history of psychiatric disorder such as anxiety, depression, dementia. There were only two elderly had the history of alcohol use. But fifty-eight percent of the sample drank coffee or tea. Regarding the depression from TGDS-30, 9.3% of subjects had depression. Most depressed elderly had mild levels of depression. Almost all of the elderly (95.3%) used adaptive defenses such as altruism, anticipation, sublimation, affiliation, self-assertion, and rationalization, as the major defensive styles. Only two and four elderly used image-distorting defenses and affect–regulating defenses respectively. The demographic and clinical characteristics of all subjects are presented in **Table 1**.

The 30 Defense styles were gathered into three groups following Thygesen's notion. [11] Pearson's correlation coefficient was applied to discover the relationship between depression and defense score. The results showed a negative correlation between adaptive defenses and depression (r = - 0.207, P = 0.019); including, anticipation (r = - 0.351, P < 0.001), self-observation (r = - 0.315, P < 0.001), and sublimation (r = - 0.298, P < 0.001). While affiliation (r = - 0.263, P = 0.003), suppression (r = - 0.184, P = 0.036), and undoing (r = - 0.241, P = 0.006) had a negative correlation with depression. Whereas passive-aggressive (r = 0.300, P = 0.001), help-rejection complaints (r = 0.182, P = 0.039), splitting self (r = 0.176, P = 0.046), fantasy (r = 0.215, P = 0.014), devaluation of self (r = 0.192, P = 0.029), and intellectualization (r = 0.191, P = 0.031) were positively correlated with depression.

Table 1. Demographic and clinical characteristics of the recruited elderly (n = 129).

	Number	Percentage
Gender		
Female	120	93.0
Age (year) = 70.6 ± 5.8, Min = 60.0, Max = 88.0		
Marital status		
Married	55	42.6
Single/widowed/divorced/separated	74	57.4
Highest education		
Uneducated/primary school	66	51.2
Secondary school/Bachelor Degree	63	48.8
Currently having income	88	68.2
Source of income (choose e" 1 source)		
Spouse/children	59	45.7
Working/investment	48	37.2
Old age allowance	43	33.3
Pensions/savings	5	3.9
Major caregiver in family		
Children	68	52.7
Spouse	36	27.9
Sibling	15	11.6
None	10	7.8
Hobbies/free time activities		
Watching television	75	58.1
Friend meetings	54	41.9
Reading	39	30.2
Volunteering	30	23.3
Pet	23	17.8
Playing cards	9	7.0
Exercise in every week	101	78.3
Using social media	81	62.8

Table 1. (Cont.) Demographic and clinical characteristics of the recruited elderly (n = 129).

	Number	Percentage
Preferred application		
Line	79	61.2
Facebook	43	33.3
Line TV/line today	14	10.9
Reason of using social media		
Communication/maintaining the relationship	64	49.6
Watching news	53	41.1
Watching TV/series/movies	38	29.5
Game	15	11.6
Underlying medical disease	100	77.5
History of psychiatric disorder	19	14.7
Chula ADL index		
Moderate dependence	27	20.9
Independence	102	79.1
The 1 - Year life stressed events		
Health		
Low	36	27.9
Moderate	73	56.6
High	20	15.5
Family		
Low	16	12.4
Moderate	86	66.7
High	27	20.9
Economy		
Moderate	120	93.0
High	9	7.0
Working		
Moderate	124	96.1
High	5	3.9
Social facet		
Moderate	107	82.9
High	22	17.1
Social activities participation		
Low	18	14.0
Moderate	92	71.3
High	19	14.7
38.0 ± 8.0, Min = 21.0, Max = 50.0		
Depression		
Non-depressed levels	117	90.7
Mild levels	9	7.0
Moderate levels	3	2.3
Severe levels	-	-
TGDS - 30 score = 4.8 ± 4.7, Min = 0.0, Max = 20.0		
Defense styles		
Image-distorting defenses	2	1.6
Affect-regulating defenses	4	3.1
Adaptive defenses	123	95.3

The results demonstrated the mean scores of various defense styles of the elderly. The mean scores on their defense styles between the non-depressed and depressed elderly were compared. Passive-aggressive, help-rejecting complaining, affiliation, devaluation of others, anticipation, sublimation, self-observation, and reaction formation were significantly different mean scores between non-depressed elderly and depressed elderly as shown in **Table 2**.

The univariate analysis was performed with the Chi-square and Fisher's exact test and found that male gender, not receiving income from their spouse/children, history of chronic kidney disease (CKD), history of psychiatric disorder, moderate dependency of IADL, moderately severe psychosocial stress from economy and social events in the past year was significantly associated with depression. The elderly attending activities in the senior club such as exercise

Table 2. Comparisons of mean scores on the 30 defense styles between not depressed and depressed elderly (n = 129).

Defense styles	Total (n = 129)	Depression		*P*-value
		Not depressed (n = 117)	Depressed (n = 12)	
	Mean ± SD	Mean ± SD	Mean ± SD	
Image distorting defenses	4.1 ± 1.1	4.1 ± 1.1	4.4 ± 1.1	0.240
Displacement	4.9 ± 1.7	4.9 ± 1.7	4.6 ± 2.0	0.489
Undoing	5.8 ± 1.9	5.9 ± 1.9	5.2 ± 1.6	0.193
Acting-out	3.0 ± 1.5	3.0 ± 1.5	3.1 ± 1.6	0.895
Passive-aggressive	3.3 ± 1.7	3.2 ± 1.6	4.4 ± 2.2	0.014**
Help-rejecting complaining	4.1 ± 2.0	4.0 ± 2.0	5.3 ± 1.5	0.019**
Projective identification	3.5 ± 1.8	3.5 ± 1.8	3.8 ± 0.9	0.355
Splitting self	3.2 ± 1.7	3.2 ± 1.7	3.8 ± 1.7	0.284
Splitting other	4.0 ± 1.7	4.0 ± 1.7	5.0 ± 2.0	0.063
Projection	3.6 ± 1.7	3.6 ± 1.7	3.8 ± 1.2	0.628
Idealization	5.5 ± 2.1	5.5 ± 2.1	5.5 ± 2.2	0.890
Affect regulating defenses	4.8 ± 0.9	4.8 ± 0.9	4.9 ± 1.1	0.774
Isolation	5.3 ± 2.0	5.3 ± 1.9	5.0 ± 2.4	0.631
Dissociation	4.3 ± 1.8	4.3 ± 1.7	4.3 ± 2.4	0.894
Affiliation	6.5 ± 1.8	6.6 ± 1.7	5.0 ± 2.2	0.002*
Intellectualization	5.4 ± 1.8	5.3 ± 1.8	5.6 ± 1.9	0.573
Suppression	5.7 ± 1.9	5.8 ± 1.9	5.1 ± 1.3	0.244
Fantasy	4.2 ± 2.1	4.1 ± 2.1	5.1 ± 1.9	0.105
Devaluation self	2.9 ± 1.9	2.9 ± 1.9	3.6 ± 1.8	0.222
Devaluation of other	3.4 ± 2.0	3.3 ± 1.9	4.7 ± 2.2	0.018**
Denial	4.7 ± 1.9	4.7 ± 1.9	4.7 ± 2.0	0.935
Withdrawal	5.9 ± 2.3	6.0 ± 2.3	5.3 ± 2.0	0.320
Repression	5.1 ± 1.8	5.0 ± 1.8	5.8 ± 1.6	0.197
Adaptive defenses	6.0 ± 1.1	6.1 ± 1.1	5.6 ± 1.6	0.343
Rationalization	6.3 ± 1.8	6.3 ± 1.7	5.8 ± 2.2	0.326
Humor	5.6 ± 2.0	5.6 ± 2.0	5.3 ± 2.2	0.613
Anticipation	6.8 ± 1.7	6.9 ± 1.6	5.3 ± 1.9	0.001*
Self-assertion	6.3 ± 2.0	6.4 ± 2.1	5.8 ± 1.5	0.395
Omnipotence	5.5 ± 1.9	5.4 ± 1.8	6.0 ± 2.3	0.250
Sublimation	6.7 ± 1.8	6.9 ± 1.7	5.0 ± 1.9	0.001*
Altruism	6.9 ± 1.4	6.8 ± 1.4	6.8 ± 1.7	0.923
Self-observation	5.9 ± 2.0	6.0 ± 2.0	4.8 ± 1.6	0.043**
Reaction formation	4.6 ± 1.8	4.5 ± 1.8	5.8 ± 1.6	0.019**

* $P < 0.01$, ** $P < 0.05$

and volunteering were more likely to be not depressed as demonstrated in **Table 3**.

Logistic regression was applied to evaluate the related factors to elderly depression. The result showed that male gender, having psychiatric history, moderately impaired IADL, moderate stress on the economy and severe stress on the social facet, a high score on passive-aggressive and reaction formation defense style, a low score on sublimation defense style were significant predictive factors of depression as presented in **Table 4**.

Table 3. The number and percentage of factors and depression among not depressed and depressed elderly (n = 129).

Factors	Depression		
	Not depressed (n = 117) n (%)	Depressed (n = 12) n (%)	*P* - value
Gender			[f]0.004*
Male	5 (4.3)	4 (33.3)	
Not received an income from spouse/children	59 (50.4)	11 (91.7)	0.006*
History of CKD	0 (0.0)	2 (16.7)	[f]0.008*
History of psychiatric disorder	13 (11.1)	5 (41.7)	[f]0.013**
Chula ADL Index			[f]0.018**
Moderately severe dependence	21 (17.9)	6 (50.0)	
Mild severe dependence	96 (82.1)	6 (50.0)	
The 1 - year Life stress events			
Economy			[f]0.001*
Low levels	88 (75.2)	3 (25.0)	
Moderate to high levels	29 (24.8)	9 (75.0)	
Social facet			[f]0.001*
Low levels	102 (87.2)	5 (41.7)	
High levels	15 (12.8)	7 (58.3)	
Type of attended activities insenoir club			
Exercise	61 (52.1)	1 (8.3)	0.004*
Volunteer	37 (31.6)	0 (0.0)	[f]0.019**

[f] = Fisher's exact test
* $P < 0.01$, ** $P < 0.05$

Table 4. The related factors among elderly depression (n = 129).

Factors	B	S.E. (B)	*P* - value	Adjusted OR (95% CI)
Male gender	2.579	1.207	0.033**	13.183 (1.238 - 40.352)
Having history of psychiatric disorder	2.022	0.867	0.020**	7.554 (1.381 - 41.329)
Moderate dependency of IADL	2.229	0.950	0.019**	9.295 (1.444 - 59.841)
Moderate to high stress on economic domains	2.415	0.857	0.005*	11.194 (2.088 - 60.001)
High stress on social facet	1.865	0.885	0.035**	6.456 (1.138 - 36.620)
High score of passive-aggressive	2.985	1.048	0.004*	19.783 (2.538 - 67.247)
Low score of sublimation	1.953	0.782	0.013**	7.049 (1.521 - 32.671)
High score of reaction formation	2.248	0.793	0.005*	9.472 (2.002 - 44.805)

*$P < 0.01$, **$P < 0.05$

Discussion

The prevalence of depression among the elderly at the senior club at Public Health Center 7 was 9.3%, which compared with the study of Siriwankulthon I, *et al.* [18] which found 13.3% of depressed elderly in Out-patient Clinic. Both studies showed different proportions. Recent results found that most depressed elderly from the senior club usually had mild levels of depression. This may indicate that most of the women elderly were socially active enough to attend their local senior club. It was congruent with the current study indicating that most of the subjects who were able to live independently showed lower depression or non-depressed. When compared with the elderly who live in nursing homes, the prevalence of depression was as high as 27.5%, and high loneliness was 26.4%. Additionally, rumination was the influencing factor among depressed elderly. [19]

Ninety-five-point three percent of the subject in our report used the adaptive defense styles as the major defense mechanism, which was also negatively correlated with depression. Therefore, most of the elderly did not have depression. Altruism was the higher average defense style, following anticipation and sublimation, which results are partially consistent with Salzman C, Shader RI. [20] Whereas, the finding from the previous study [12] found depressed individuals may use some defenses to avoid painful feelings or threatening events which developed into depressive syndromes. Difference from adaptive defenses, maladaptive defenses could lead to depression because of the pattern of response to mood disturbance. Also, mood disorder and defense use might be related to a third factor such as low self-esteem. [12]

In the multivariate analysis, we found several factors relate to depression. As female gender was consistently demonstrated to be at risk for depression across the lifespan. Pilania M, *et al*. found one-third of female elderly suffered from depression. [21] However, we discovered that the male gender had a higher risk for depression and almost half of the male elderly from these samples had depression. It might be a result of the gender role that force the males to conceal their feeling and put them to unconscious. Men were expected to be strong and non-sharing their feeling with others, have negative feelings, or cry regarding being unmasculine. [22] Therefore, they will attempt to handle trouble by themselves and rarely decide to join the activities of the senior club.

The history of psychiatric disorders reported by the sample was associated with depression. Forty-two percent of the elderly with a history of psychiatric disorders had depression, which would also affect their quality of life. [23] The elderly with moderately severe dependence had a higher risk to have depression. The result was congruent with the studies of Kitikulthanan P, *et al*. [24] which indicated that the elderly who had various interesting activities, independent instrumental activities of daily living, had less chance to develop depression. This was the characteristic of the elderly in the senior club in the study.

Encountering prolonged stressful events can trigger mental health problems. We found that stressful life events on economic and social facets were crucial contributing factors to depression. Moderate to high-stress levels in the economy and high-stress levels of social facets could escalate depression among our subjects. According to previous studies, they found stressful events concerned with geriatric depression. [25, 26] Thus, when threatened with high-stress life events could increase more risk for depression. Generally, the elderly retired from their career resulting in inadequate income. So, their expenses more depended on others.They receive the supported income from a specific resource such as their family, relatives, the welfare state, or social welfare for the elderly. Consist with the current result that showed 45.7% of the sample received income supported by their spouse/children. Socially, this domain involved loss or victim such as property damage, house flooding, loss of a partner, or friends, injured or abuse by others, or residents not being safe. [16] The 2-stressed domains could affect the elderly feelings such as low self-esteem, sadness, and despair which led to depression in late life.

For the defense styles, the elderly who often use passive-aggressive and reaction formation could increase their chances for depression that partially consist with Craşovan DI, Craşovan DNR. [27] Both defensive styles were utilized to neutralize the intrapsychic conflicts and respond unconsciously in the opposite way that they felt. In cases that the intrapsychic conflict, which usually was the aggressive impulse, was not properly resolved, it would be converted back to oneself and caused negative emotion. Moreover, these kinds of defensive styles also made inaccurate communication, diminished self-esteem from disappointment in their actual objectivity, and perpetuate interpersonal relationships due to the inability to communicate honestly.

Concerning the sublimation defense style, the depressed elderly had a lower mean score than other groups. This defense style is defined as a healthy defense and is found across the lifespan, from adolescence to adulthood. It is the mature defensive style that represents the maturity of their cognition and behavior. However, sublimation may be less utilized in old age.[28] It also indicated the limited potential of adaptation for the elderly to cope with their life crises. The elderly who rarely used sublimation increased risk for depression. This reflected the incapacity of using the effective defense mechanism that properly wards off their instinctual drives and conflicts into socially acceptable behaviors.

We found that male gender, having a history of depression and economic and social stressors, and utilizing of unhealthy defense style were the crucial risk factor for depression in late life. Screening for these risk factors and promoting the appropriate styles of defenses would help the elderly to maintain their self-esteem and healthy relationship with others, and lower the risk for geriatric depression. However, there were limitations in this study. Because the majority of the attendants in the senior were female and physically independent, the results may not be able to generalize to the elderly in the community or the other senior clubs.

Conclusion

The majority of the elderly from the senior club at Public Health Center 7 were not depressed. Only 9.3% of the subject had depressed that was consistent with the previous reports found in the subjects from the other senior clubs in Bangkok. The predictive factors for depression were male gender, history of psychiatric disorder, limited ability in performing IADL, and existing economic and social stressors. The elderly in this report frequently use adaptive defenses that was negatively related to depression. The results could be applied to the health providers in caring for the elderly in the senior club.

Acknowledgements

The authors would like to express deep gratitude to all of the subjects who were involved in this study.

Conflict of interest statement

Each of the authors has completed an ICMJE disclosure form. None of the authors declare any potential or actual relationship, activity, or interest related to the content of this article.

Data sharing statement

All data generated or analyzed during the present study are included in this published article. Further details are available for noncommercial purposes from the corresponding author on reasonable request.

References

1. Setapura P, Chaisongkram N. Prevalence and associated factors of depressive disorder among the elderly in Thailand, 2021. RHPC9Journal 2022; 16:1070-84.
2. Booniam S, Wongpakaran T, Lerttrakarnnon P, Jiraniramai S, Kuntawong P, Wongpakaran N. Predictors of passive and active suicidal ideation and suicide attempt among older people: A study in tertiary care settings in Thailand. Neuropsychiatr Dis Treat 2020;17:3135-44.
3. Laird KT, Krause B, Funes C, Lavretsky H. Psychobiological factors of resilience and depression in late life. Transl Psychiatr 2019;9:88.
4. Poungvarin N, Thongtang O, Ussantachai P, Pradithsuvarn R, Devahastin V, Sukhatungka K, et al. Thai geriatric depression scale-TGDS train the brain forum committee. Siriraj Hosp Gaz 1994;46:1-9.
5. Beck AT, Steer RA, Brown GK. Beck depression inventory-II. San Antonio 1996;78:490-8.
6. Remes O, Mendes JF, Templeton P. Biological, psychological, and social determinants of depression: A review of recent literature. Brain Sci 2021;11:1633.
7. Fakoya OA, McCorry NK, Donnelly M. Loneliness and social isolation interventions for older adults: A scoping review of reviews. BMC Public Health 2020;20:129.
8. Zenebe Y, Akele B, W/Selassie M, Necho M. Prevalence and determinants of depression among old age: A systematic review and meta-analysis. Ann Gen Psychiatry 2021;20:55.
9. Freud A. The ego and the mechanisms of defence. London: Routledge;1937.
10. Di Giuseppe M, Perry JC, Prout TA, Conversano C. Editorial: Recent empirical research and methodologies in defense mechanisms: Defenses as fundamental contributors to adaptation. Front Psychol 2021; 12:802602.
11. Thygesen KL, Drapeau M, Trijsburg RW, Lecours S, de Roten Y. Assessing defense styles: Factor structure and psychometric properties of the new defense style questionnaire 60 (DSQ-60). Int J Psychol Psychol Ther 2008;8:171-81.
12. Busch FN. Psychodynamic theory and approaches to depression. In: Charis C, Panayiotou G, editors. Depression conceptualization and treatment dialogues from psychodynamic and cognitive behavioral perspectives. Cham: Springer international publishing; 2021. p. 53-67.

13. Blanco C, Kampe L, Wall MM, Liu SM, Wang S, Caligor E, Olfson M. Approximating defense mechanisms in a national study of adults: prevalence and correlates with functioning. Transl Psychiatry 2023;13:21.
14. Oh M, Kim JW, Yoon NH, Lee SA, Lee SM, Kang WS. Differences in personality, defense styles, and coping strategies in individuals with depressive disorder according to age groups across the lifespan. Psychiatry Investig 2019;16:911-8.
15. Linsuwannont P. Study of elderly depression in Rongmuang sub-district Pratumwan Bangkok Metropolis [Thesis]. Nakhon Pathom: Mahidol University; 2000.
16. Nakrapanich S. Life events and adaptation during pregnancy of women with and without obstetric complication in Chulalongkorn Hospital [Thesis]. Bangkok: Chulalongkorn University; 1988.
17. Jitapunkul S, Kamolratanakul P, Ebrahim S. The meaning of activities of daily living in a Thai elderly population: development of a new index. Age Ageing 1994; 23:97-101.
18. Siriwankulthon I, Jiraporncharoen W, Pinyopornpanish K, Angkurawaranon C, Rojanasumapong A, Inpa C, Nantsupawat N. Prevalence and factors associated with depression in elderly patients in family medicine outpatient clinic, Chiang Mai University. J Ment Health Thai 2021;29:1-11.
19. Rachadachan Y, Sangon S, Nintachan P, Rungruangsiripan M. The influences of gender, age, ability to perform activities of daily living, loneliness, and rumination on depression of older persons living in nursing home. JPNMH 2021;35:1-22.
20. Salzman C, Shader RI. Depression in the elderly. I. Relationship between depression, psychologic defense mechanisms and physical illness. J Am Geriatr Soc 1978;26:253-60.
21. Pilania M, Yadav V, Bairwa M, Behera P, Gupta SD, Khurana H, et al. Prevalence of depression among the elderly (60 years and above) population in India, 1997-2016: A systematic review and meta-analysis. BMC Public Health 2019;19:832.
22. Hyde JS, Mezulis AH. Gender differences in depression: biological, affective, cognitive, and sociocultural factors. Harv Rev Psychiatry 2020; 28:4-13.
23. Charoensak S, Sittironnarit G, Satra T, Muangpaisan W, Srinontprasert V. Prevalence of psychiatric disorders in elderly patients, quality of life of patients and caregivers, and their correlated factors. J Psychiatr Assoc Thailand 2018;63:89-98.
24. Kitikulthanan P, Nintachan P, Sangon S. The relationships between gender, activities of daily living, resilience, and social support and depression among older persons. JPNMH 2019;33:137-55.
25. Disu TR, Anne NJ, Griffiths MD, Mamun MA. Risk factors of geriatric depression among elderly Bangladeshi people: A pilot interview study. Asian J Psychiatry 2019;44:163-9.
26. Buvneshkumar M, John KR, Logaraj M. A study on prevalence of depression and associated risk factors among elderly in a rural block of Tamil Nadu. Indian J Public Health 2018;62:89-94.
27. Craşovan DI, Craşovan DNR. Identification of psychological defense mechanisms in non-psychotic major depressive disorder. Using the Romanian version of the defense style questionnaire-60. Revista de psihologie 2021;67:39-56.
28. Vaillant GE. Defense mechanisms. In: Zeigler-Hill V, Shackelford TK, editors. Encyclopedia of personality and individual differences. Cham: Springer international publishing; 2017. p. 1-10.