

**A COMPARATIVE STUDY ON PSYCHODYNAMIC AND DRUG THERAPY AMONG  
UNIPOLAR DEPRESSIVE PATIENTS: A CROSS-SECTIONAL STUDY**\*<sup>1</sup>Abinaya Arulappan, <sup>2</sup>Venkateswaramurthy Nallasamy<sup>1</sup>Pharm D, JKKN College of Pharmacy, Komarapalayam, Namakkal, 638183, Tamil Nadu, India.<sup>2</sup>Professor and Head, JKKN College of Pharmacy, Komarapalayam, Namakkal, 638183, Tamil Nadu, India.**\*Corresponding Author: Abinaya Arulappan**

Pharm D, JKKN College of Pharmacy, Komarapalayam, Namakkal, 638183, Tamil Nadu, India.

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**ABSTRACT**

**Background:** Depression is frequently managed in primary care disease settings. While both drug therapy and psychotherapy are commonly used, their comparative effectiveness is not clearly established. **Aim:** To compare the efficacy of drug therapy alone versus combined drug therapy and psychotherapy therapy in managing unipolar depression. **Objective:** To determine the efficacy of combining pharmacological therapy with psychodynamic treatment for depression. **Methodology:** The study has a sample size of 316 whose depression severity, whether mild, moderate, or severe, was evaluated using Hamilton Depression Rating Scale (HDRS). The collected data were divided into two types of therapy: drug therapy alone and drug therapy combined with counselling, and then further categorized into four groups based on the time frame of treatment. **Results and discussion:** Among 316 participants, 179 were females (56.6%) and 137 were males (43.4%) reported having depression. Depending upon the duration of therapies patients undergoing drug therapy and counselling for a period of more than 3 months and less than a year are maintained in the mild and moderate stages of depression thus the combined therapy is effective within 1 year. **Conclusion:** Drug therapy alone and combined therapy showed similar effectiveness in managing depression, with the two treatment groups showing no statistically significant difference.

**KEYWORDS:** Unipolar Depression, Psychodynamic, Combination Therapy, Hamilton Depression Rating Scale, Depression Severity.

**INTRODUCTION**

Depression is considered a primary care condition. Depressive symptoms are the most prevalent medical problems seen during a primary care visit (high blood pressure is second).<sup>[1]</sup> Depression, clinically referred to as major depressive disorder, is a prevalent yet serious mental health condition that significantly impacts an individual's mood, cognition, and daily functioning. Despite its severity, it remains a treatable disorder with a range of effective interventions. As reported by the World Health Organization, approximately 3.8% of the global population experiences depression, with higher prevalence observed among adults (5.0%) and individuals aged 60 and above (5.7%).<sup>[2]</sup>

The major depressive disorder (MDD) greatly affects daily performance and overall standard of living as it is associated to the illness and increased mortality.<sup>[3]</sup> The

female preponderance in depression is common and massive.<sup>[4]</sup> Over 700,000 human beings die because of suicide every 365 days. Suicide is the fourth foremost reason for death among people aged 15 to 29. Although effective treatment for mental disorders are available, more than 75% of individuals in low and middle income nations go untreated.<sup>[5]</sup> Patients with depression often receive antidepressant therapy or psychotherapy, either alone or in combination. Psychotherapy is recommended for mild to moderate depression, as medications for depression may not be as effective as originally thought.<sup>[6]</sup> A recent study found that combining an antidepressant with cognitive behavioral psychotherapy is more beneficial than either alone in treating chronic severe depression. In minor depression, psychotherapy alone may be nearly as helpful as the combination of psychotherapy and antidepressants.<sup>[6]</sup> Treatment-resistant depression (TRD) is linked to a higher prevalence of

comorbidity, including physical, mental disorders, and the impairment of functioning, which includes social functioning, reduced satisfaction with lifestyle, and elevated danger of suicide. It is rather recurrent, with approximately 80% of TRD patients relapsing within 12 months of remission.<sup>[6]</sup>

**Neuroanatomy:** The neurobiology of mood regulation and depression involves the prefrontal cortex (dorsolateral, ventromedial, and orbitofrontal), cingulate cortex (ventral anterior cingulate and subgenual cingulate), thalamus, amygdala, hippocampus, ventral striatum, temporal and parietal cortices, and midbrain and brainstem nuclei.<sup>[8]</sup>

**Neurobiology:** It has been hypothesized that deficiencies in the concentration of intra-synaptic monoamine neurotransmitters, along with serotonin, dopamine, and norepinephrine, lead to the development of depressive symptoms and depressive disorders.<sup>[9]</sup>

The purpose of this study was to compare the efficacy of pharmacological treatment versus psychodynamic and pharmacological treatment in treating depression.

**METHODOLOGY**

**Sample collection**

In this study the patients who are undergoing treatment for depression with either drug therapy alone or drug therapies with counselling were selected. The Institutional Ethical Committee at JKKN College of Pharmacy in Kumarapalayam, Erode, Tamil Nadu, accepted this study. Participants were selected from Government Headquarters Hospital and a private counselling centre in Erode, Tamil Nadu. The data were collected for a period of 6 months, but it was a one-time assessment, and no follow-up was conducted.

**Inclusion and exclusion criteria**

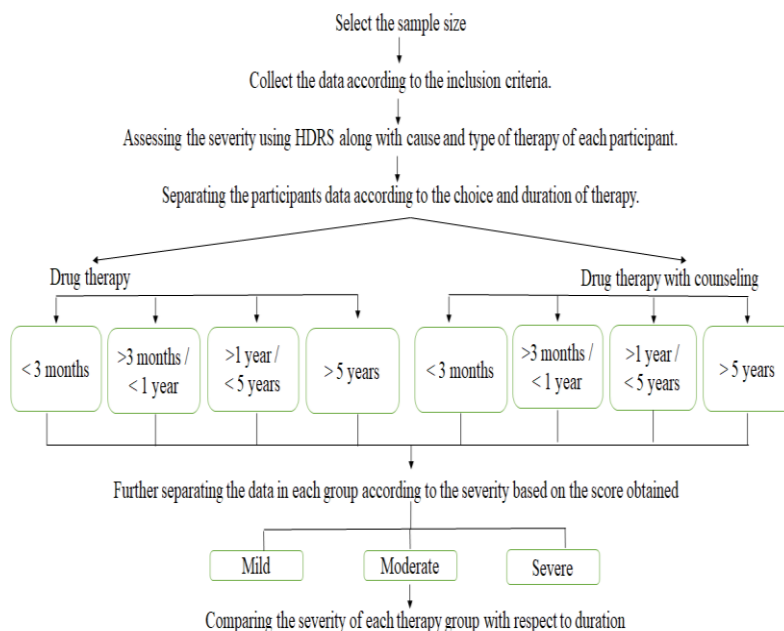
The study's selection criteria comprised male and female subjects. Participants with unipolar depression aged 20 to 65 years, including those with comorbid physical illnesses such as hypertension, diabetes mellitus, anaemia, and so on, were incorporated into the study. Individuals with bipolar disorder, schizophrenia or newly diagnosed with depression for less than a month were excluded.

**Assessment Tools**

The Hamilton Depression Rating Scale (HDRS) was used to assess the level of severity of depression (Y. Leykin et al., 2007).<sup>[10]</sup> It is a standardized and sensitive scale used to determine the severity of depression. The sample was categorized into two treatment groups: drug therapy alone and combined therapy with counselling. These groups were further divided based on treatment.

**Statistical Analysis**

The chi square test (p value of <0.0001) was used to establish the significant difference between drug therapy and drug therapy with counselling. A p-value of < 0.05 was considered statistically significant. The Mann-Whitney test (over one month/under three months p-value of >0.9999; over three months/under one-year p-value of 0.7; over one year/under five years p-value of 0.8; over five years p-value of 0.3) was used to evaluation the relationship between therapy duration and depression severity. The data were compared for efficacy of both the therapies, and the therapy in which the patients with the most number of mild and moderate levels of depression was taken as an effective therapy and useful for depression. Figure 1. Working Methodology.



**Figure 1: Working Methodology.**

**RESULTS**

**Participant Demographics and Therapy Distribution**

Of the 316 study participants, 130 were taking drugs only, and 186 were receiving combination therapy (drugs with counsel). Of these, 137 were male and 179 female Table 1. In the drug treatment group, 144 participants were identified with mild symptoms, 40 with moderate, and only 2 were categorized as severe Table 2. Most of the participants were female (n=179), and 137 men with depression were included. The most prevalent age group was 51-65 years (n=135), with high number of elderly

female patients (n=88). As per living status, rural dwellers (n=249) reported more depression compared with urban residents. According to marital status, married women (n=165) had higher rates of depression than unmarried participants (n=37). Educational status additionally had some effects when compared to education only up to primary (n=22) and higher secondary level (n=114); illiterate persons (n=97) vs. graduates (n=83) were found to have more depression. Unemployment was also a factor, as 166 jobless people reported depression, while 150 employed people did.

**Table 1: Demographic Characteristics of Study Participants and Duration of Treatment.**

Sr. No	Variable	Gender		Total (n=316)	Percentage (%)
		Male (n=137)	Female (n=179)		
1	<b>Age (in years)</b>				
	<b>20 -30</b>	30	26	56	17.7
	<b>31-40</b>	27	37	64	20.3
	<b>41-50</b>	33	28	61	19.3
	<b>51-65</b>	47	88	135	42.7
2	<b>Residence</b>				
	<b>Rural</b>	108	141	249	78.8
	<b>Urban</b>	29	38	67	21.2
3	<b>Marital status</b>				
	<b>Married</b>	114	165	279	88.3
	<b>Unmarried</b>	23	14	37	11.7
4	<b>Educational qualification</b>				
	<b>Primary</b>	11	11	22	7
	<b>Higher secondary</b>	44	17	114	36
	<b>Graduate</b>	45	38	83	26.2
	<b>Illiterate</b>	37	60	97	30.6
5	<b>Employment</b>				
	<b>Employed</b>	89	61	150	47.4
	<b>Unemployed</b>	48	118	166	52.5
6	<b>Duration of treatment and Drug therapy</b>				
	<b>&gt;1 month / &lt;3 years</b>	13	10	23	17.7
	<b>&gt;3 months / &lt;1 year</b>	20	22	42	32.3
	<b>&gt;1 year / &lt;5 years</b>	26	29	55	42.3
	<b>&lt;5 years</b>	1	9	10	7.7
	<b>Drug therapy with counselling</b>				
	<b>&gt;1 month / &lt;3 years</b>	12	15	27	14.5
	<b>&gt;3 months / &lt;1 year</b>	53	67	120	64.5
<b>&gt;1 year / &lt;5 years</b>	11	25	36	19.3	
	<b>&lt;5 years</b>	1	2	3	1.6
7	<b>Treatment</b>				
	<b>Drug therapy</b>	60	70	130	41
	<b>Drug therapy with counselling</b>	77	109	186	58.9

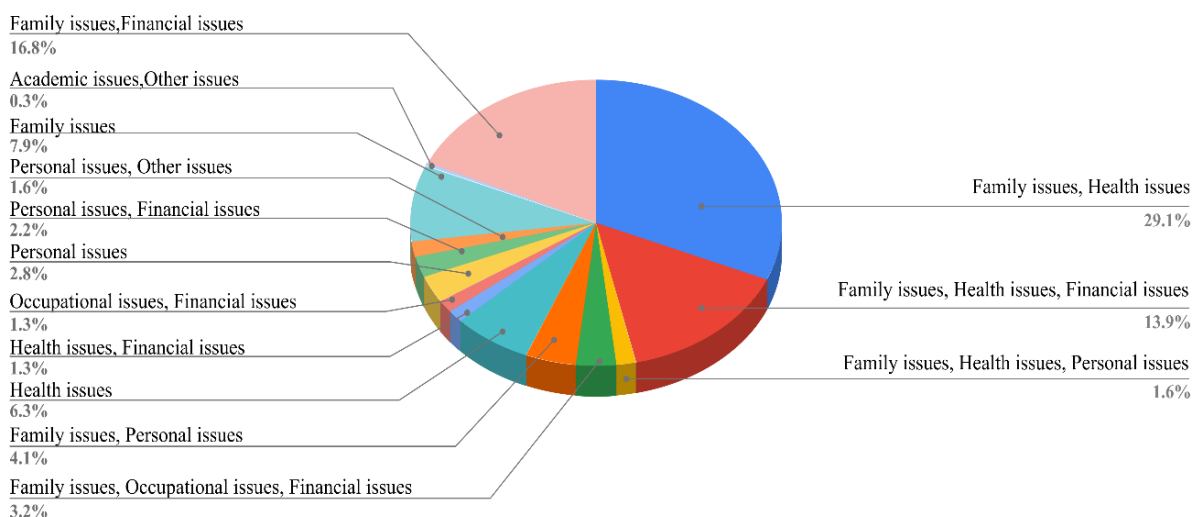
Note: > More than, < Less than.

**Table 2: Treatment Severity Based on Therapy Type.**

Sr. No	Treatment	Mild	Moderate	Severe	P value
1	<b>Drug therapy (n=130)</b>	40 (30.7%)	81 (62.2%)	9 (6.9%)	<0.0001
2	<b>Drug therapy and counselling (n=186)</b>	144 (77.4%)	40 (21.5%)	2 (1.1%)	

**Table 3: Comparison of Depression Severity by Treatment Duration.**

Sr. No	Duration	Severity	Drug therapy (n=130)	Drug therapy with counselling (n=186)	P-value
1	>1 month / <3 years (n=50)	Mild	5(10%)	20(40%)	>0.9999
		Moderate	16(32%)	7(14%)	
		Severe	2(4%)	-	
2	>3 months / <1 year (n=162)	Mild	11(6.8%)	91(56.1%)	0.7000
		Moderate	27 (16.7%)	28(17.3%)	
		Severe	4(2.5%)	1(0.6%)	
3	>1 year / <5 years (n=92)	Mild	20(21.7%)	31(33.7%)	0.8000
		Moderate	31(33.7%)	6(6.5%)	
		Severe	4(4.3%)	-	
4	<5 years (n=12)	Mild	3(25%)	1(8.3%)	0.3000
		Moderate	6(50%)	1(8.3%)	
		Severe	1(8.3%)	-	
		Moderate	6(50%)	1(8.3%)	
		Severe	1(8.3%)	-	



**Figure 2: Causes for Depression.**

It is found that the major cause of depression among patients is family issues with health issues, which is about 29.1%; the second major cause is family issues with financial issues, which is about 16.8%; and the third major cause is family issues combined with health and financial issues, which is about 13.9%. Patients also reported other issues such as personal, academically and occupational issues and they are minimal causes Figure 2. With the treatment-wise categorization, it is found that out of 316 patients suffering from depression and undergoing therapy for the condition, 186 patients are undergoing both drug therapy and counseling, and 130 patients are undergoing drug therapy alone. While categorizing based on duration of therapy, for the drug therapy alone group, 23 (17.7%) participants have undergone drug therapy for the period of less than three months, 42 (32.3%) for more than three months, 55 (42.3%) for more than 1 year and 10 (7.7%) for more than five years, and for the drug therapy and psychodynamic therapy group, 27 (14.5%) patients have undergone combined therapy for the period of less than 3 months, 120 (64.5%) patients for more than 3 months, 36

(19.3%) patients for the period of more than 1 year and 2 (1.6%) for more than 5 years Table 3.

**DISCUSSION**

Women were more likely than men to experience depression, which is in accordance with research by Citak S et al.<sup>[11]</sup> that found that female patients reported depression at higher rates than male patients. This is related to hormonal variations that occur in women during various phases of their menstrual and reproductive phase, as explained in the study by P R Albert et al.<sup>[12]</sup> Women's hormonal fluctuations, particularly throughout early adulthood, premenstruation, pregnancy, and the beginning of menopause, have been associated with an increased risk of depression. This suggests that fluctuation in female hormone levels be a contributing factor to depression.

Most of the depressed patients in this study were females aged 50 and older. In the research by Halstensen K et al.<sup>[13]</sup> and Asres B et al.,<sup>[14]</sup> the average age was 46 years old, the pooled prevalence of depression among the

elderly in Africa was very high as 26.3%, which needs special attention, and this is due to neurodegeneration and decrease in cognitive ability due to ageing. The same has been explained in the study by Gottfries CG,<sup>[15]</sup> modifications to biochemistry in the ageing brain and alterations in neurodegenerative illness. Monoamine abnormalities are detected in various illnesses, which clearly lower the threshold for depression in the elderly.

Most of the patients from the rural area reported having depression because there is a lack of awareness about their condition and low self-care among the people, and they should be given awareness about the treatment for this condition and improve their mental health, which is similar with the findings of Xin Y *et al.*<sup>[16]</sup> Rural patients had a depression rate of 57.67%, which was greater than the urban patients' rate of 44.59%. This is due to poor self-rated health and restrictions in daily functioning. According to Probst J C *et al.*'s<sup>[17]</sup> study, individuals residing in rural areas showed a higher likelihood of developing depression, as did those with fair/poor self-assessed health, diagnosed hypertension, functional impairments, or recent health changes in the past year.

The study by Pan L *et al.*,<sup>[18]</sup> which demonstrated a clear correlation between depressive symptoms and marital status, is similar to the finding that depression is more prevalent among married women. This is because a person's emotional health is influenced by their marital status, such that marital satisfaction, self-related health, and employment status affect the state of mind, which, on a low satisfaction index, generates depression and low mood by worrying about them. Earle J R *et al.*<sup>[19]</sup> discovered that marital contentment, subjective wellness, and job position are stronger indicators of midlife mental health than marital status. Women's depressive symptoms are more affected by the quality of their marriage than men's.

Limited awareness among individuals with lower educational attainment may contribute to a higher susceptibility to depression and difficulties in managing financial responsibilities. This is due to low self-esteem and response to negative thoughts. The same has been explained in the study by Kim B S *et al.*,<sup>[20]</sup> which showed illiteracy among the elderly correlated with depression that is more prevalent and severe. A lack of education has a deleterious impact on depressive symptoms, particularly those related to self-esteem. Even after accounting for clinical and demographic variables, individuals with lower education attainment were more inclined than their literate counterparts to respond negatively to several items on the SGDS-K, including statements such as "I have memory problems," "others are better off than I am," and "I feel worthless."

There is no discrimination among employed and unemployed patients; both seem to have depression, as they are not able to meet their financial need, which affects the family and health. Women are more likely to

suffer from depression is in line with other research, which attribute to hormonal fluctuations during reproductive stages. McGee R E *et al.*<sup>[21]</sup> explained how being unemployed was related to other independent variables. The high level of unemployment is a public health concern. Unemployment is related with a greater risk of depression than employment. Depression among unemployed youngsters may be linked to stress caused by delays in accomplishing developmental goals associated with the transition to adulthood, such as identity formation through job searching.

The major cause for depression is that family, health and financial issues, and other issues occur in a minor way. As the people are mostly from rural areas, illiterate and unemployed people are facing a lot of issues with the basic needs of survival in the existing reality of life. As people are not able to meet their needs either individually or for the family, they lose their self-confidence, and they are unable to manage their daily routines and necessities. Thus, for this mental strength and positive thinking are very important, and for that, counselling and therapy are necessary to treat the patient clinically; drug therapy is necessary. Thus, when both are given together, it might be helpful for the patient to revive themselves from the existing situation and also recover from the depression.

By comparing both the therapies, the percentage of severe and moderate depression is high in patients undergoing drug therapy alone, as in combined therapy the percentage of mild depression is higher. By correlating the patients who are undergoing therapies for depression for less than three months, those who are undergoing combined therapy had mild and moderate depression, and those who are undergoing drug therapy alone had 2 patients with severe depression. Similarly, of those undergoing combined therapy for more than three months/less than 1 year, the majority of the patients had mild depression, and 1 had severe depression; of those who were taking drug therapy alone, the majority had moderate depression, and 4 had severe depression. Among patients undergoing therapies for more than one to five years, none in the combined therapy group experienced severe depression, and only five had moderate depression. In contrast, among those receiving drug therapy alone, five had severe depression.

According to Mann-Whitney it was found that there was no substantial distinction between the two groups, implying that the both therapies have the same effect, which is in accordance with a research carried by DeRubeis RJ *et al.*<sup>[22]</sup> study discovered no difference in outcome between ADM and CT, with 58% of patients in both therapy groups achieving the criterion for 'response'.

#### Limitations

- In this study we attempted to find the effect of drug therapy and psychodynamic therapy for depression patients.

- The significance of this analysis lies in its cross-sectional design, as very few studies have explored depression and its therapies using this approach.
- In our study we have tried to establish the difference in the therapies and the severity of depression based on the therapy, but we could not say which therapy is effective, as we did not have baseline data for comparing the effect.
- This is a real-time study, but in this study we did not concentrate specifically on a particular drug and whether the patients are undergoing regular or irregular therapy and relapse of the condition.
- The data was taken only once, and based upon the duration and type of therapy, we have established our conclusions, which are applicable to the particular population and time period on which the study was conducted, and these conclusions might not be considered for other studies.

### CONCLUSION

From this study we report that both drug therapy and drug therapy with counseling for depression show similar effects, and there is no significant difference between the two therapies. Depending upon the duration of therapies, patients undergoing drug therapy and counselling for a period of more than 3 months and less than a year are maintained in mild and moderate stages of depression; thus, the combined therapy is effective within 1 year of therapy. The findings suggest that combined therapy helps maintain mild depressive symptoms during the first year of treatment. However, long-term improvement requires further investigation due to irregular adherence in some patients. In patients undergoing both drug therapy and counselling, most were in the mild stage of depression; thus, patients' response to combined therapy is greater compared to drug therapy alone, but depending upon the patient's condition and requirements, the type of therapy should be planned and decided. By this we conclude that the therapies show effects when given together.

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### Ethical Clearance

The study was approved from the Institutional Ethics Committee of J.K.K.Natraja College of Pharmacy on 17<sup>th</sup> March 2022. The study was carried out in accordance with the principles as enunciated in the Declaration of Helsinki.

### REFERENCES

1. Rakel RE. Depression-primary care. Clin Office Pract., 1999; 26(2): 211-24.
2. World Health Organization. Depression [Internet]. 2021 Sep 13 [cited 2022 Mar 15]. Available from: <https://www.who.int/health-topics/depression>
3. Cho Y, Mishiho I, Fujimoto S, et al. Impact of depression onset and treatment on the trend of annual medical costs in Japan: an exploratory, descriptive analysis of employer-based health insurance claims data. Adv Ther., 2022; 39(4): 1553-66.
4. Parker G, Brotchie H. Gender differences in depression. Int Rev Psychiatry., 2010; 22(5): 429-36.
5. World Health Organization. Depression [Internet]. 2022 Sep 28 [cited 2022 Mar 15]. Available from: <https://www.who.int/news-room/factsheets/detail/depression>
6. Driessen E, Van HL, Don FJ, et al. The efficacy of cognitive-behavioral therapy and psychodynamic therapy in the outpatient treatment of major depression: a randomized clinical trial. Am J Psychiatry, 2013; 170(9): 1041-50.
7. Olfson M, Marcus SC, Druss B, Elinson L, Tanielian T, Pincus HA. National trends in the outpatient treatment of depression. JAMA, 2002; 287(2): 203-9.
8. Otte C. Incomplete remission in depression: role of psychiatric and somatic comorbidity. Dialogues Clin Neurosci., 2008; 10(4): 453-60.
9. Lindegaard T, Berg M, Andersson G. Efficacy of internet-delivered psychodynamic therapy: systematic review and meta-analysis. Psychodyn Psychiatry, 2020; 48(4): 437-54.
10. Leykin Y, Amsterdam JD, DeRubeis RJ, Gallop R, Shelton RC, Hollon SD. Progressive resistance to a selective serotonin reuptake inhibitor but not to cognitive therapy in the treatment of major depression. J Consult Clin Psychol., 2007; 75(2): 267-76.
11. Citak S, Avci SH, Kahraman BB. The effectiveness of short-term psychodynamic psychotherapy in depression and anxiety disorders. Psychodyn Pract., 2021; 27(4): 372-83.
12. Albert PR. Why is depression more prevalent in women? J Psychiatry Neurosci., 2015; 40(4): 219-21.
13. Halstensen K, Gjestad R, Luyten P, et al. Depression and mentalizing: a psychodynamic therapy process study. J Couns Psychol., 2021; 68(6): 705-18.
14. Bedaso A, Mekonnen N, Duko B. Estimate of the prevalence of depression among older people in Africa: a systematic review and meta-analysis. Aging Ment Health, 2022; 26(6): 1095-105.
15. Gottfries CG. Is there a difference between elderly and younger patients with regard to the symptomatology and etiology of depression? Int Clin Psychopharmacol., 1998; 13 Suppl 5: S13-8.

16. Xin Y, Ren X. Predicting depression among rural and urban disabled elderly in China using a random forest classifier. *BMC Psychiatry*, 2022; 22(1): 118.
17. Probst JC, Laditka SB, Moore CG, Harun N, Powell MP, Baxley EG. Rural-urban differences in depression prevalence: implications for family medicine. *Fam Med.*, 2006; 38(9): 653-60.
18. Pan L, Li L, Peng H, et al. Association of depressive symptoms with marital status among the middle-aged and elderly in rural China: serial mediating effects of sleep time, pain and life satisfaction. *J Affect Disord.*, 2022; 303: 52-7.
19. Earle JR, Smith MH, Harris CT, Longino CF Jr. Women, marital status, and symptoms of depression in a midlife national sample. *J Women Aging.*, 1998; 10(1): 41-57.
20. Kim BS, Lee DW, Bae JN, et al. Impact of illiteracy on depression symptomatology in community-dwelling older adults. *Int Psychogeriatr.*, 2014; 26(10): 1669-78.
21. McGee RE, Thompson NJ. Unemployment and depression among emerging adults in 12 states, Behavioral Risk Factor Surveillance System, 2010. *Prev Chronic Dis.*, 2015; 12: E38.
22. DeRubeis RJ, Siegle GJ, Hollon SD. Cognitive therapy versus medication for depression: treatment outcomes and neural mechanisms. *Nat Rev Neurosci.*, 2008; 9(10): 788-96.