

**A SUMMARY OF DEPRESSION**<sup>1</sup>\*Jincey Merin Kurian and <sup>2</sup>Punya Prakash<sup>1</sup>Nitte Gulabi Shetty Memorial Institute of Pharmaceutical Sciences Paneer, Derlakette, Mangaluru – 575018.<sup>2</sup>Srinivas College of Pharmacy Valachil, Mangalore.**\*Corresponding Author: Jincey Merin Kurian**

Nitte Gulabi Shetty Memorial Institute of Pharmaceutical Sciences Paneer, Derlakette, Mangaluru – 575018.

Article Received on 29/03/2023

Article Revised on 19/04/2023

Article Accepted on 09/05/2023

**ABSTRACT**

Researchers in India have long paid close attention to the disease of depression. Numerous research from India have been published in the last 50–60 years that focus on various facets of this illness that is frequently present. Depression is a mood disorder characterized by a sense of inadequacy, despondency, decreased activity, pessimism, Anhedonia and sadness where these symptoms severely disrupt and adversely affect the person's life, sometimes to such an extent that suicide is attempted or results. The search for an extended understanding of the causes of depression, and for the Development of additional effective treatments is highly significant. Clinical and pre-clinical studies suggest stress is a key mediator in the pathophysiology of depression. This current review focus on symptoms of depression, types of depression causes and treatment of depression.

**KEYWORDS:** Depression, prevalent disorder, Anhedonia, despondency.**INTRODUCTION**

According to WHO predictions, depression will overtake cardiovascular disease as the second most common cause of death in the world in next ten years. Currently, one in five women and twelve men worldwide suffer from depression. Not just adults, but two percent of school children, and five percent of teenagers also suffer from depression, and these mostly go unidentified. Depression has been the commonest reason why people come to a psychiatrist, although the common man's perception is that all psychological problems are depression.<sup>[1,2]</sup> Depression is a mood disorder that causes persistent feelings of sadness, emptiness, and loss of joy. It is different from the mood fluctuations that people regularly experience as a part of life. Major life events, such as bereavement or the loss of a job, can trigger depression. But depression is distinct from the negative feelings a person may temporarily have in response to a difficult life event. Depression often persists in spite of a change of circumstances and causes feelings that are intense, chronic, and not proportional to a person's circumstances. It is an ongoing problem, not a passing one. While there are different types of depression, the most common one is major depressive disorder. It consists of episodes during which the symptoms last for at least two weeks. Depression can last for several weeks, months, or years. For many people, it is a chronic illness that gets better and then relapses.

**SYMPTOMS OF DEPRESSION**

Not everyone who is depressed or manic experience every symptom. Some may experience a few symptoms,

some many. Also, the severity of symptoms may vary with individuals.<sup>[3,4]</sup>

- Persistent sad, anxious or empty mood,
- Feelings of hopelessness, pessimism,
- Feeling of guilt, worthlessness, helplessness,
- Loss of interest or pleasure in hobbies and activities that you once enjoyed, including sex,
- Insomnia, early-morning awakening or oversleeping,
- Appetite and or weight loss or overeating and weight gain,
- Decreased energy, fatigue, being slowed down,
- Thoughts of death or suicide, suicide attempts,
- Restlessness, irritability,
- Difficulty concentrating, remembering or making decisions,
- Persistent physical symptoms that do not respond to treatment, such as headaches, digestive disorders and chronic pain.

**TYPES OF DEPRESSION<sup>[3,4,5]</sup>**

- Major Depression
- Anxious distress
- Melancholy.
- Agitated
- Persistent Depressive Disorder
- Bipolar Disorder
- Seasonal Affective Disorder (SAD)
- Psychotic Depression
- Peripartum (Postpartum) Depression
- Premenstrual Dysphoric Disorder (PMDD)

- Situational' Depression
- Situational' Depression
- Atypical Depression
- Treatment Resistant Depression

### Major Depression

You may hear your doctor call this "major depressive disorder." You might have this type if you feel depressed most of the time for most days of the week.<sup>[6,7,8]</sup>

Some other symptoms you might have are:

- Loss of interest or pleasure in your activities
- Weight loss or gain
- Trouble getting to sleep or feeling sleepy during the day
- Feeling restless and agitated, or else very sluggish and slowed down physically or mentally
- Being tired and without energy
- Feeling worthless or guilty
- Trouble concentrating or making decisions
- Thoughts of suicide

### Anxious distress

You feel tense and restless most days. You have trouble concentrating because you're worried that something awful could happen, and you feel like you might lose control of yourself.

### Melancholy

You feel intensely sad and lose interest in the activities you used to enjoy. You feel bad even when good things happen. You might also:

- Feel particularly down in the mornings
- Lose weight
- Sleep poorly
- Have suicidal thoughts

### Agitated

You feel uneasy most of the time. You may also:

- Talk a lot
- Move for no reason, like fidgeting with your hands and pacing around the room
- Act impulsively

Talk therapy can help. You'll meet with a mental health specialist who will help you find ways to manage your depression. Medications called antidepressants can also be useful.

When therapy and medication aren't working, other options your doctor may suggest are:

- Electroconvulsive therapy (ECT)
- Transcranial magnetic stimulation (TMS)
- Vagus Nerve Stimulation (VNS)

ECT uses electrical pulses, TMS uses a special kind of magnet, and VNS uses an implanted device. All are design to stimulate certain areas of brain activity. This helps the parts of your brain that control your mood work better.

### Persistent Depressive Disorder

If you have depression that lasts for 2 years or longer, it's called persistent depressive disorder. This term is used to describe two conditions previously known as dysthymia (low-grade persistent depression) and chronic major depression.

You may have symptoms such as:

- Change in your appetite (not eating enough or overeating)
- Sleeping too much or too little
- Lack of energy, or fatigue
- Low self-esteem
- Trouble concentrating or making decisions
- Feeling hopeless

### Bipolar Disorder

Someone with bipolar disorder, which is also sometimes called "manic depression," has mood episodes that range from extremes of high energy with an "up" mood to low "depressive" periods.

When you're in the low phase, you'll have the symptoms of major depression.

Medication can help bring your mood swings under control. Whether you're in a high or a low period, your doctor may suggest a mood stabilizer, such as lithium.<sup>[9]</sup>

The FDA has approved three medicines to treat the depressed phase:

- Seroquel
- Latuda
- Olanzapine-fluoxetine combination

### Seasonal Affective Disorder (SAD)

Seasonal affective disorder is a period of major depression that most often happens during the winter months, when the days grow short and you get less and less sunlight. It typically goes away in the spring and summer.

If you have SAD, antidepressants can help. So can light therapy. You'll need to sit in front of a special bright light box for about 15-30 minutes each day.

### Psychotic Depression

People with psychotic depression have the symptoms of major depression along with "psychotic" symptoms, such as:

- Hallucinations (seeing or hearing things that aren't there)
- Delusions (false beliefs)
- Paranoia (wrongly believing that others are trying to harm you)

A combination of antidepressant and antipsychotic drugs can treat psychotic depression. ECT may also be an option.

### Peripartum (Postpartum) Depression

Women who have major depression in the weeks and months after childbirth may have peripartum depression. Approximately 1 in 10 men also experience depression in the peripartum period. Antidepressant drugs can help similarly to treating major depression that is unrelated to childbirth.

### Premenstrual Dysphoric Disorder (PMDD)

Women with PMDD have depression and other symptoms at the start of their period.

Besides feeling depressed, you may also have:

- Mood swings
- Irritability
- Anxiety
- Trouble concentrating
- Fatigue
- Change in appetite or sleep habits
- Feelings of being overwhelmed

### Situational Depression

This isn't a technical term in psychiatry. But you can have a depressed mood when you're having trouble managing a stressful event in your life, such as a death in your family, a divorce, or losing your job. Your doctor may call this "stress response syndrome."

Psychotherapy can often help you get through a period of depression that's related to a stressful situation.

### A typical Depression

This type is different from the persistent sadness of typical depression. It is considered to be a "specifier" that describes a pattern of depressive symptoms. If you have atypical depression, a positive event can temporarily improve your mood.

Other symptoms of atypical depression include:

- Increased appetite
- Sleeping more than usual
- Feeling of heaviness in your arms and legs
- Oversensitive to criticism

### Treatment Resistant Depression

About 1/3 of people treated for depression try several treatment methods without success. If that's you, you might have treatment resistant depression. There are many reasons your depression might be treatment resistant. For example, you might have other conditions that make your depression difficult to treat.

If you're diagnosed with treatment resistant depression, your doctor might recommend some less conventional treatment options. Electroconvulsive therapy (ECT) is sometimes helpful in this situation.

### Causes of Depression<sup>[10,11]</sup>

#### Environmental factors and Genetic causes

#### Genetic Causes of Depression

Most of the published genetic association studies of mood disorders have focused on functional polymorphisms (DNA sequence variations that alter the expression and/or functioning of the gene product) in the loci encoding the serotonin transporter (SLC6A4), serotonin 2A receptor (5HTR2A), tyrosine hydroxylase (TH) (the limiting enzyme for dopamine synthesis), tryptophan hydroxylase 1 (TPH1) (serotonin synthesis), and catechol-o-methyltransferase (COMT) (dopamine catabolism).

It has long been known that depressive illnesses can run in families, but until fairly recently it was not fully known whether people inherited a susceptibility to these illnesses or if something else such as the environment was the true culprit. Those who research depression have been able to determine that to some extent depressive illnesses can be inherited. What appears to be inherited is a vulnerability to depression. This means that if we have close relatives who have clinical depression, we may inherit a tendency to develop the illness. It does not mean that we are destined to become depressed.<sup>[12,13]</sup> Bipolar disorder has a strong genetic influence. Of those with bipolar disorder, approximately 50% of them have a parent with a history of clinical depression. When a mother or father has bipolar disorder, their child will have a 25% chance of developing some type of clinical depression. If both parents have bipolar disorder, the chance of their child also developing bipolar disorder is between 50% and 75%. Brothers and sisters of those with bipolar disorder may be 8 to 18 times more likely to develop bipolar disorder, and 2 to 10 times more likely to develop major depressive disorder than others with no such siblings.<sup>[14]</sup>

#### Twin Studies

Much of what we know about the genetic influence of clinical depression is based upon research that has been done with identical twins. Identical twins are very helpful to researchers since they both have the exact same genetic code. It has been found that when one identical twin becomes depressed the other will also develop clinical depression approximately 76% of the time. When identical twins are raised apart from each other, they will both become depressed about 67% of the time. Because both twins become depressed at such a high rate, the implication is that there is a strong genetic influence. If it happened that when one twin becomes clinically depressed the other always develops depression, then clinical depression would likely be entirely genetic. However because the rate of both identical twins developing depression is not closer to 100% this tells us that there are other things that influence a person's vulnerability to depression. These may include environmental factors such as childhood experiences, current stressors, traumatic events, exposure to substances, medical illnesses.

**Environmental Causes of Depression**<sup>[15,16,17]</sup>

Environmental causes of depression include events such as stress, traumatic events and childhood difficulties. These are events that can happen to anyone and they happen during our everyday lives. They are considered factors that are outside of us. Some researchers refer to these events as sociological or psychosocial factors because they are a "meeting" or "combination" of events that happen in society and the function and workings of the human mind. Researchers have known for some time that the experiences (events) we have in our lives can and do affect our mental health. Thoughts, emotions and behaviours of people are influenced by the prior experiences in their lives. These experiences can include past relationships, childhood development and past crises. The key to development of clinical depression in some people seems to be how they react to the various environmental causes or factors in their everyday lives.

**Stress**

There appears to be a very complex relationship between stressful situations, the reaction of the individual's mind and body to stress, and the development of clinical depression. Most researchers believe that for some people there is a direct relationship between a stressful event and the development of depression. What is interesting to note is that this stress can be negative or positive. Examples of negative stress are loss of a loved one, loss of a job, loss of a relationship and divorce. Examples of positive stress are planning for a wedding, preparing for a new job, and moving to a new city. Both negative and positive stress from environmental events can precede the development of depression.<sup>[18]</sup>

**Traumatic Events:** It is a fact that many people have experienced a traumatic event prior to developing depression. Traumatic events in the lives of people include loss of a loved one, a serious medical illness, the end of a marriage or significant financial loss. These types of events can destroy the sense of control and stability in a person's life, often leading to emotional distress. **Childhood Difficulties:** It has long been known that people with severe difficulties in childhood have higher rates of clinical depression. The most common childhood difficulties include sexual, emotional, or physical abuse, dysfunctional upbringing, parental separation, and mental illness in one or both of the parents. One of the most difficult emotional events for a child to endure is the separation or death of a parent before the age of eleven.<sup>[19,20]</sup> Children that have experienced this event also demonstrate a higher probability of developing depression.

**Synthetic Chemicals**

Every day we take in synthetic chemicals from all over. From preservatives, additives and hormones that are found and added to so many of our foods, pesticides that are sprayed and air and water pollution as well. Studies have shown that air and water pollution alone can cause cancer and other diseases. Synthetic chemicals and

pollutants are now being more closely looked at as a link to depression and Major Depressive episodes.

**Noise Pollution**

Noise pollution has been linked to aggression, hypertension, increased stress levels, tinnitus, hearing loss and disruptions in sleep. Specifically, tinnitus is linked to severe depression, panic attacks and forgetfulness. Continual exposure to noise pollution has also been linked to cardiovascular disease and increased blood pressure. A person with possible depressive tendencies will become even more susceptible to depression with continual, prolonged exposure to noise pollution.<sup>[21,22]</sup> **Electrical Pollution:** We are constantly surrounded by radio waves everywhere we go. Much of the electrical equipment we use works off of radio waves and these radio waves have been found to induce depression and rage. The exact causes as to why are not yet known and unlike other types of environmental causes of depression, electrical pollution cannot be seen, heard, tasted, or felt. But, it does have a negative effect on our mind and body.<sup>[23]</sup>

**Natural and Catastrophic Disasters**

Natural and catastrophic disasters, such as hurricanes, earthquakes, or fires, and even manmade disasters such as bombings and war can push an already susceptible person into a severe Major Depression.<sup>[24]</sup> The National Centre for Environmental Health has found that people, who normally would not be a candidate for depression, can become depressed after major life altering episodes, such as their house being destroyed in a natural disaster.

**Treatment**

Mild depression can be effectively treated with either medication or psychotherapy. Moderate to severe depression may require an approach combining medication and psychotherapy.<sup>[25]</sup>

**Drug Treatment:** 50-65% of patients respond to the first antidepressant. No particular antidepressant agent is superior to another in efficacy or time to response. Choice can be guided by matching patients' symptoms to side effect profile, presence of medical and psychiatric co morbidity, and prior response. Relative costs can also be considered (e.g., generics). UMHS preferred agents are Fluoxetine (generic) and citalopram (Celexa®).<sup>[26]</sup> Patients treated with antidepressants should be closely observed for possible worsening of depression or suicidality, especially at the beginning of therapy or when the dose increases or decreases. The therapeutic effects of antidepressants are believed to be caused by their effects on neurotransmitters and neurotransmission. The Monoamine Hypothesis is a biological theory stating that depression is caused by the under activity in the brain of monoamines, such as dopamine, serotonin, and norepinephrine.

Monoamine oxidase inhibitors (MAOIs) block the degradation of the monoamine neurotransmitters



serotonin, norepinephrine, and dopamine by inhibiting the enzyme monoamine oxidase, leading to increased concentrations of these neurotransmitters in the brain and an increase in neurotransmission.

Tricyclic antidepressants (TCAs) prevent the reuptake of various neurotransmitters, including serotonin, norepinephrine, and to a much less extent, dopamine. Nowadays the most common antidepressants are selective serotonin reuptake inhibitors (SSRIs), which prevent the reuptake of serotonin (thereby increasing the level of active serotonin in synapses of the brain). Other novel antidepressants affect norepinephrine reuptake, or different receptors on the nerve cell.

Other research suggests that delayed onset of clinical effects from antidepressants indicates involvement of adaptive changes in antidepressant effects. Rodent studies have consistently shown up regulation of the 3, 5-cyclic adenosine monophosphate (cAMP) system induced by different types of chronic but not acute antidepressant treatment, including serotonin and norepinephrine uptake inhibitors, monoamine oxidase inhibitors, tricyclic antidepressants, lithium and electroconvulsions. cAMP is synthesized from adenosine 5- triphosphate (ATP) by adenylyl cyclase and metabolized by cyclic nucleotide phosphodiesterases (PDEs) 46-47. Data also suggest that antidepressants can modulate neural plasticity in long-term administration.

One theory regarding the cause of depression is that it is characterized by an overactive hypothalamic-pituitary-adrenal axis (HPA axis) that resembles the neuro-endocrine (cortisol) response to stress. These HPA axis abnormalities participate in the development of depressive symptoms, and antidepressants serve to regulate HPA axis function.<sup>[28]</sup>

#### **Frequent Initial Visits**

Patients require frequent visits early in treatment to assess response to intervention, suicidal ideation, side effects, and psychosocial support systems.

#### **Continuation Therapy**

Continuation therapy (9-12 months after acute symptoms resolve) decreases the incidence of relapse of major depression. Long term maintenance or life-time drug therapy should be considered for selected patients based on their history of relapse and other clinical features.

#### **Education/Support**

Patient education and support are essential. Social stigma and patient resistance to the diagnosis of depression continue to be a problem.

#### **Alternative Treatments for Depression<sup>[29,30]</sup>**

There is no evidence that any alternative treatment or home remedy is effective in treating moderate to severe depression. However, some people with mild depression may find benefit from home remedies through increased

relaxation. Relaxation can provide relief from depressive symptoms. It can also help cope with some of the causes of depression, such as grief, anxiety, changing roles, and even physical pain. If you have depression and are considering using an alternative form of therapy, it is important to seek the advice of the health care provider. Examples of alternative therapies include: Acupuncture, Aromatherapy, Biofeedback, Chiropractic treatments, Guided imagery, Herbal remedies, Hypnosis, Massage therapy, Meditation, Relaxation, Yoga, etc. Meditation is sometimes described as an altered state of consciousness. It is a form of relaxation that, unlike sleep, is entered into purposely. Meditation is usually practiced regularly for at least 10 minutes each day. While the body is at rest, the mind is cleared by focusing on one thought -- sometimes a word, a phrase, or a particular scene. Relaxation is marked by decreased muscle tension and respiration, lower blood pressure and heart rate, and improved circulation. The relaxation response summoned by meditation slows down the sympathetic nervous system. In addition to slowing the heart rate and lowering blood pressure, this response can also lead to: i. Decreased sweat production, ii. Decreased oxygen consumption, iii. Decreased catecholamine production (chemicals associated with the stress response). iv. Decreased cortisol production (stress hormone). Different forms of exercise can lower stress, relax you, and reduce depression. Exercise can also increase your energy, balance, and flexibility. In general, exercise is a safe, effective, and easy way to improve your well-being.

Music therapy has been shown to be an effective non-drug approach for people of all ages that assist in reducing fear, anxiety, stress, or grief. Music can be thought of as a natural tranquilizer for the human spirit. Pythagoras, the sixth century B.C. philosopher and mathematician, is thought to have been the founder of music therapy. During World War II, the Veterans' Hospitals had volunteers who played their music for the wounded soldiers. The results were so positive that the VA added music therapy programs. In its simplest form, all you need to incorporate music therapy is a CD player or mp3 player with headphones. Then choose music -- from New Age "mood" music to rock to classical -- that matches your personal needs, moods, and tastes.

#### **CONCLUSION**

Depression is a serious medical condition and a profound public health concern. Although the development of depression is likely due to a combination of factors, understanding the effects, possible triggers, and treatments of the disorder is essential for promoting the well being of affected individuals. There is also a need to study the course of depressive disorders present in the world so as to determine the need and duration of continuation treatment. Studies should also evaluate the cost-effective models of treatment which can be easily used in the primary care setting to effectively treat depression.

## REFERENCES

1. Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen HU, Kendler KS. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: results from the National Comorbidity Survey. *Archives of general psychiatry*, 1994 Jan 1; 51(1): 8-19.
2. Widiger TA, Samuel DB. Diagnostic categories or dimensions? A question for the Diagnostic and statistical manual of mental disorders--. *Journal of abnormal psychology*, 2005 Nov; 114(4): 494.
3. Katon W. The epidemiology of depression in medical care. *The International Journal of Psychiatry in Medicine*, 1988 Mar; 17(1): 93-112.
4. Wisner KL, Parry BL, Piontek CM. Postpartum depression. *New England journal of medicine*, 2002 Jul 18; 347(3): 194-9.
5. Kupfer DJ, Berger PA, ROBBINS H, RUSH A, SCHORR L, CONGER J. Mood disorders: pharmacologic prevention of recurrences. *The American journal of psychiatry*, 1985; 142(4): 469-76.
6. Penninx BW, Guralnik JM, Ferrucci L, Simonsick EM, Deeg DJ, Wallace RB. Depressive symptoms and physical decline in community-dwelling older persons. *Jama*, 1998 Jun 3; 279(21): 1720-6.
7. Robins LN. Psychiatric disorders in America. The epidemiologic catchment area study, 1991.
8. Wells KB, Stewart A, Hays RD, Burnam MA, Rogers W, Daniels M, Berry S, Greenfield S, Ware J. The functioning and well-being of depressed patients: results from the Medical Outcomes Study. *Jama*, 1989 Aug 18; 262(7): 914-9.
9. Howland R., General health, health care utilization, and medical comorbidity in dysthymia, *Int J Psychiatry Med*, 2005; 23: 211-238.
10. Wells KB, Burnam MA, Rogers W, Hays R, Camp P. The course of depression in adult outpatients: results from the Medical Outcomes Study. *Archives of general psychiatry*, 1992 Oct 1; 49(10): 788-94.
11. Williams Jr JW, Kerber CA, Mulrow CD, Medina A, Aguilar C. Depressive disorders in primary care: prevalence, functional disability, and identification. *Journal of General Internal Medicine*, 1995 Jan; 10(1): 7-12.
12. Wagner HR, Burns BJ, Broadhead WE, Yarnall KS, Sigmon A, Gaynes BN. Minor depression in family practice: functional morbidity, co-morbidity, service utilization and outcomes. *Psychological medicine*, 2000 Nov; 30(6): 1377-90.
13. Cooper-Patrick L, Crum RM, Ford DE. Characteristics of patients with major depression who received care in general medical and specialty mental health settings. *Medical care*, 1994 Jan 1; 15-24.
14. Paykel ES, Priest RG. Recognition and management of depression in general practice: consensus statement. *BMJ: British Medical Journal*, 1992 Nov 11; 305(6863): 1198.
15. Simon GE, VonKorff M, Durham ML. Predictors of outpatient mental health utilization by primary care patients in a health maintenance organization. *The American journal of psychiatry*, 1994 Jun.
16. Song F, Freemantle N, Sheldon TA, House A, Watson P, Long A, Mason J. Selective serotonin reuptake inhibitors: meta-analysis of efficacy and acceptability. *British Medical Journal*, 1993 Mar 13; 306(6879): 683-7.
17. Kessler RC, Nelson CB, McGonagle KA, Liu J, Swartz M, Blazer DG. Comorbidity of DSM-III-R major depressive disorder in the general population: results from the US National Comorbidity Survey. *The British journal of psychiatry*, 1996 Jun; 168(S30): 17-30.
18. Regier DA, Narrow WE, Rae DS, Manderscheid RW, Locke BZ, Goodwin FK. The de facto US mental and addictive disorders service system: Epidemiologic Catchment Area prospective 1-year prevalence rates of disorders and services. *Archives of general psychiatry*, 1993 Feb 1; 50(2): 85-94.
19. Pincus HA, Tanielian TL, Marcus SC, Olfson M, Zarin DA, Thompson J, Zito JM. Prescribing trends in psychotropic medications: primary care, psychiatry, and other medical specialties. *Jama*, 1998 Feb 18; 279(7): 526-31.
20. Gerber PD, Barrett J, Barrett J, Manheimer E, Whiting R, Smith R. Recognition of depression by internists in primary care: a comparison of internist and "gold standard" psychiatric assessments. *Journal of General Internal Medicine*, 1989 Jan; 4(1): 7-13.
21. Klinkman MS. Competing demands in psychosocial care: a model for the identification and treatment of depressive disorders in primary care. *General hospital psychiatry*, 1997 Mar 1; 19(2): 98-111.
22. Borowsky SJ, Rubenstein LV, Meredith LS, Camp P, Jackson-Triche M, Wells KB. Who is at risk of nondetection of mental health problems in primary care?. *Journal of general internal medicine*, 2000 Jun; 15: 381-8.
23. Linde K., Mulrow C.D. and St. John's wort for depression, *Cochrane Review*, The Cochrane Library, (2008)
24. US Preventive Services Task Force. *Guide to Clinical Preventive Services*, 2nd ed, Alexandria, Va., International Medical Publishing, 2009.
25. Feightner J.W., Early detection of depression. In, Canadian Task Force on the Periodic Health Examination, *Canadian Guide to Clinical Preventive Health Care*, Ottawa, Health Canada, 2004; 2(1): 450-454.
26. Banerjee S., Shamash K., MacDonald A.J. and Mann A.H., The use of the SelfCARE (D) as a screening tool for depression in the clients of local authority home care services—a preliminary study, *Int J Geriatr Psychiatry*, 2006; 13(4): 695-699.
27. Bashir K., Blizard R., Jenkins R. and Mann A., Validation of the 12-item general health questionnaire in British general practice, *Primary Care Psychiatry*, 2006; 2(7): 4-7.

28. Beekman A.T., Deeg D.J., Van Limbeek J., Braam A.W., De Vries M.Z. and Van Tilburg W., Criterion validity of the Center for Epidemiologic Studies Depression scale (CES-D), results from a community-based sample of older subjects in The Netherlands, *Psychol Med.*, 2011; 1(5): 231-235.
29. Bird A.S., Macdonald A.J.D., Mann A.H. and Philpot M.P., Preliminary experience with the Selfcare (D), A selfrating depression questionnaire for use in elderly, noninstitutionalized subjects, *Int J Geriatr Psychiatry*, 2002; 4(3): 31-38.
30. Post RM. Prophylaxis of bipolar affective disorders. *International Review of Psychiatry*, 1990 Jan 1; 2(3-4): 277-320.