



DEPRESSION: A REVIEW

Miss. Pradnya Kiran More, Miss. Thange Trupti Ashok, Miss. Shweta Radhakrushna Solunke

Pratibhatai Pawar College of Pharmacy Wadala Mahadeo Taluka Shirampur
pradnyakmore2000@gmail.com

ABSTRACT

Major melancholy is a temper sickness characterised by using a experience of inadequacy, despondency, reduced activity, pessimism, anhedonia and unhappiness the place these signs severely disrupt and adversely have an effect on the person's life, every now and then to such an extent that suicide is tried or results. The search for an prolonged grasp of the motives of depression, and for the improvement of extra high-quality remedies is surprisingly significant. Clinical and pre-clinical research advise stress is a key mediator in the pathophysiology of depression.

Depression as a ailment has continually been a center of attention of interest of researchers in India. Over the closing 50-60 years, massive wide variety of research has been posted from India addressing more than a few factors of this usually popular disorder. The a variety of factors studied covered epidemiology, demographic and psychosocial chance factor, neurobiology, symptomatology, comorbidity, evaluation and diagnosis, have an effect on of depression, cure associated troubles and prevention of melancholy in addition to the efficacy and tolerability of a variety of antidepressants. Here, we overview information on a range of elements of depression, originating from India

Previous research set out cognitive impairments in essential depression. However, solely two research had been Performed amongst sufferers struggling from treatment-resistant melancholy (TRD) and carried out on confined pattern Sizes. Here, we aimed to signify cognitive impairments in TRD, and their affiliation with the severity of Depression and every day functioning and anatomical proof suggests that peculiar glutamatergic neurotransmission may additionally be associated with the pathophysiology of depression. Compounds that act as NMDA receptor antagonists may also be a potential cure for depression, relatively the rapid-acting agent Recently severe research have confirmed that neuroinflammation performs a fundamental position in the patho-genesis of depression. Repetitive transcranial magnetic stimulation (rTMS) has been used to deal with despair for years however its mechanism is no longer entirely elucidated. Sustained stress at some point of COVID-19 might also be related with despair in front-line scientific staff, Which would expose them to extreme threats. This find out about aimed to have a look at whether or not the relationship between Perceived stress and melancholy is mediated by using insomnia, and whether or not this mediation is moderated through resilience. Infertility, and fertility treatment, are related with psychological distress that might also influence Subsequent intellectual health along with postpartum depression and anxiety.

Keywords: *depression, neurotransmitters, stress, treatment antidepressants*

1. INTRODUCTION

Depression is a clinical situation that influences your temper and capability to function. Depression kinds consist of scientific depression, bipolar depression, dysthymia, seasonal affective sickness and others. Treatment picks vary from counseling to medicines to intelligence stimulation and complementary therapies.

Depressive signs consist of feeling sad, anxious or hopeless. The situation can additionally purpose subject with thinking, memory, ingesting and sleeping. A analysis of most important depressive sickness (clinical depression) capacity you have felt sad, low or nugatory most days for at least two weeks whilst additionally having other signs and symptoms such as sleep problems, loss of hobby in activities, or exchange in appetite. [1]

Without treatment, despair can get worse and remaining longer. In extreme cases, it can lead to self-harm or death. Fortunately, redress can be very fine in enhancing signs of depression. Depression is frequent all over the world. Healthcare vendors estimate that almost 7% of American adults have despair each and every year. More than 16% of U.S. adults — round 1 in 6 — will trip despair in their lifetime. Depression is a frequent intellectual disorder. Globally, it is estimated that 5% of adults go through from the disorder. It is characterised by means of chronic disappointment and a lack of activity or pleasure in formerly moneymaking or exciting activities. It can additionally disturb sleep and appetite. Tiredness and bad awareness are common[2]. Depression is a main motive of incapacity round the world and contributes significantly to the international burden of disease. The results of melancholy can be long-lasting or recurrent and can dramatically have an effect on a person's capacity to characteristic and stay a profitable life. The reasons of despair encompass complicated interactions between social, psychological and organic factors. Life occasions such as childhood adversity, loss and unemployment make a contribution to and might also catalyse the improvement of depression.



Psychological and pharmacological remedies exist for depression.[3] However, in low- and middle-income countries, remedy and aid offerings for despair are frequently absent or underdeveloped. It is estimated that greater than 75% of humans struggling from intellectual issues in these international locations do no longer get hold of treatment[4].

All these are myths, and by and large created via trust healers, or Unqualified counsellors, and non-medical professionals for their personal Vested interest, and mostly by using an unaware of society. An Increased awareness, and strategy to psychiatrists, has been the Main motive for the enlarge in variety of sufferers and no longer Necessarily an amplify in prevalence. With more recent medication, And higher facilities, treating despair has turn out to be easier, and Most human beings reply very nicely to treatment, and return to Optimum functioning very soon³. While the affect of unsuccessful fertility cure on women's mental fitness and relationships is nicely documented, is a extreme psychiatric ailment with lifetime prevalence about 15–18% . It imposes a large burden on people's fitness and society as a whole.[5] According to the World Health Organization, depression will rank as the first purpose of burden of disorder international by way of depression is a extreme psychiatric ailment with lifetime prevalence about 15–18% . It imposes a large burden on people's fitness and society as a whole. According to the World Health Organization, depression will rank as the first purpose of burden of disorder international by way of 2030. The pathophysiology of melancholy is now not thoroughly understood, however Some hypotheses have been proposed, such as the monoamine hypoth-Esis, the neurotrophic hypothesis, and the neuroplasticity hypothesis. Recent research point out that neuroinflAmmation performs a fundamental position in the pathogenesis of despair .Since December 2019, COVID-19 has unexpectedly unfold to the complete World and has developed into a international pandemic .Front-line scientific body of workers has attracted huge interest in this battle Against COVID-19. Of note, they go through from a greater danger of contamination And a heavier workload than generic humans , which Increases the danger of melancholy with similarly penalties that may induce job burnout and suicide.[6

2. MECHANISM OF ACTION:

The mechanisms of moves of different antidepressants such as monoamine oxidase inhibitors (MAOIs), phenelzine (Nardil) and tranylcypromine (Parnate) partner with the inhibition of the enzymatic conversion of 5HT and NE into their corresponding metabolites. MAOIs are generally prescribed in instances of atypical or drug resistant depression. [7]These compounds incorporate a certain stage of toxicity. On the contrary to it, the moclobemide (manerix) has been mentioned to be the first reversible inhibitor of monoamine oxidase A (RIMA). This molecule is found incredibly more high quality and safe.²³ Another antidepressant, nefazodone (serzone) has properties of both: it acts like SSRIs which blocks the reuptake of 5HT and additionally act as an antagonist of 5HT₂ receptor²³ thereby reducing the stimulating outcomes similar to SSRIs. Nefazodone has structural and pharmacological similarities to any other antidepressant, trazodone (desyrel). The only distinction is that nefazodone binds with $\alpha 1$ receptors with low affinity. All of these antidepressants do not notably influence ACH mediated features [8]

Sr.No	Antidepressant Substrate (Common Name)	Doses	Therapeutic Index	Side effect	Toxicity in overdose
1	Isocarboxazid	40-60 mg/day	Wide	Dizziness, Headache, Tremors Or Shaking; Constipation, Nausea; Or Dry Mouth.	High
2	Phenelzine	60 mg/day	Wide	Dizziness, Headache, Drowsiness, Sleep Disturbances (Including Insomnia,	High
3	Tranylcypromine	60 mg/day	Wide	Scleroderma, Flare-Up Of Cystic Acne, Ataxia, Confusion, Disorientation, Memory Loss, Urinary Frequency, Urinary Incontinence, Urticaria, Fissuring In Corner Of Mouth, Akinesia	Low
4	Moclobemide	300 mg/day	Wide	Nausea, Dry Mouth, Constipation, Diarrhoea, Anxiety, Restlessness, Insomnia, Dizziness	High

3. TYPES OF DEPRESSION

Major depressive disorder (MDD):

Major despair (clinical depression) has excessive or overwhelming signs that closing longer than two weeks. These signs inter vene with day-to-day life. [9]

Bipolar depression:

People with bipolar disease have alternating intervals of low temper and extraordinarily high-energy (manic) periods. During the low period, they may additionally have despair signs and symptoms such as feeling unhappy or hopeless or missing energy. [9]

Perinatal and postpartum depression:

Perinatal” skill round birth. Many human beings refer to this kind as postpartum depression. Perinatal despair can manifest in the course of being pregnant and up to one yr after having a baby. Symptoms go past “the toddler blues,” which reasons minor sadness, fear or stress. [9]

Persistent depressive disorder (PDD):

PDD is additionally regarded as dysthymia. Symptoms of PDD are much less extreme than principal depression. But human beings trip PDD signs for two years or longer. [9]

Premenstrual dysphoric disorder (PMDD):

Premenstrual dysphoric ailment is a extreme structure of premenstrual ailment (PMS). It influences girls in the days or weeks main up to their menstrual period. [9]

Psychotic depression:

People with psychotic melancholy have extreme depressive signs and symptoms and delusions or hallucinations. Delusions are beliefs in matters that are no longer based totally in reality, whilst hallucinations contain seeing, hearing, or feeling touched by using matters that aren’t virtually there. [10]

Seasonal affective disorder (SAD):

Seasonal depression, or seasonal affective disorder, commonly starts offevolved in late fall and early winter. It frequently goes away in the course of the spring and summer. [10]

4. SYMPTOMS OF DEPRESSION

Depression can affect your emotions, mind and body. Depression symptoms include:

1. Feeling very sad, hopeless or worried.
2. Not enjoying things that used to give you joy.
3. Being easily irritated or frustrated
4. Eating too much or too little
5. Changes in how much you sleep
6. Having a difficult time concentrating or remembering things.
7. Experiencing physical problems like headache, stomachache or sexual dysfunction
8. Thinking about hurting or killing yourself.[11]

5. CAUSES OF DISEASE – ENVIRONMENTAL FACTORS AND GENE COMPONENT

Genetic Causes of Depression:

Most of the posted genetic affiliation research of temper Disorders have centered on purposeful polymorphisms (DNASequence versions that alter the expression and/or functioning Of the gene product) in the loci encoding the serotoninTransporter (SLC6A4), serotonin 2A receptor (5HTR2A),Tyrosine hydroxylase (TH) (the limiting enzyme for dopamine Synthesis), tryptophan hydroxylase 1 (TPH1) (serotoninSynthesis), and catechol-o-methyltransferase (COMT)(dopamine catabolism.It has lengthy been regarded that depressive ailments can run inFamilies, however till pretty these days it used to be now not totally acknowledged whether People inherited a susceptibility to these ailments or if Something else such as the

surroundings used to be the authentic culprit. Those who look up despair have been in a position to decide that to some extent depressive ailments can be inherited. What appears to be inherited is a vulnerability to depression. That if we have shut family who have scientific Depression, we might also inherit a tendency to increase the illness. It does not imply that we are destined to grow to be depressed. [12]

Bipolar sickness has a robust genetic influence. Of these with Bipolar disorder, about 50% of them have a dad or mum with a record of scientific depression. When a mom or father has Bipolar disorder, their baby will have a 25% danger of developing some kind of medical depression. If each dad and mom have bipolar disorder, the danger of their baby additionally growing Bipolar sickness is between 50% and 75%. Brothers and sisters of these with bipolar ailment might also be eight to 18 instances greater possibly to boost bipolar disorder, and two to 10 instances extra probable to develop most important depressive disease than others with no such siblings. [12]

Twin studies:

Much of what we are aware of about the genetic influence of scientific despair is primarily based upon lookup that has been executed with same twins. Identical twins are very useful to researchers considering that they each have the actual equal genetic code. It has been observed that when one equal twin turns into depressed the different will additionally increase medical despair approximately 76% of the time. When equal twins are raised apart from every other, they will each emerge as depressed about 67% of the time. Because each twin turns out to be depressed at such an excessive rate, the implication is that there is a robust genetic influence. If it took place that when one twin turns into clinically depressed the different continually develops depression, then scientific Depression would probably be completely genetic. However due to the fact the price of each equal twin growing melancholy is now not closer to one hundred percent this tells us that there are different matters that influence a person's vulnerability to depression. These might also include environmental elements such as childhood experiences, current stressors, disturbing events, publicity to substances, medical illnesses, etc.

Research has additionally been executed with fraternal twins. Unlike identical twins that have the identical genetic code, these siblings share solely about 50% of their genetic make-up and do not necessarily seem to be alike. Studies have proven that when one fraternal twin turns into depressed, the different additionally develops Depression about 19% of the time. This is nevertheless a greater fee of Depression when in contrast to universal prices for the generic public, once more pointing closer to a genetic have an impact on in the development of scientific depression. [13]

Environmental Causes of Depression:

Environmental motives of despair consist of occasions such as stress, annoying occasions and childhood difficulties. These are events that can occur to every body and they manifest at some stage in our everyday lives. They are regarded elements that are backyard of us. Some researchers refer to these activities as sociological or psychosocial elements due to the fact they are a "meeting" or "combination" of activities that take place in society and the feature and workings of the human mind. Researchers have recognized four some time that the experiences (events) we have in our lives can and do have an effect on our intellectual health. Thoughts, thoughts behaviour of human beings are influenced via the prior experiences in their lives. These experiences can encompass previous relationships, childhood improvement and previous crises. The key to improvement of medical despair in some humans looks to be how they react to the more than a few environmental motives or elements in their everyday lives. [14]

Stress:

There seems to be a very complicated relationship between traumatic situations, the response of the individual's mind and physique to stress, and the improvement of scientific Depression. Most researchers agree with that for some human beings there's a direct relationship between a worrying match and the development of depression. What is fascinating to observe is that this stress can be bad or positive. Examples of bad stress are loss of a cherished one, loss of a job, loss of a relationship and divorce. Examples of fine stress are planning for a wedding, making ready for a new job, and shifting to a new city. Both bad and wonderful stress from environmental occasions can precede the improvement of depression. [15]

Childhood Difficulties:

It has lengthily been regarded that humans with extreme difficulties in childhood have greater charges of medical Depression. The most frequent childhood difficulties consist of sexual, emotional, or bodily abuse, dysfunctional upbringing, parental separation, and intellectual sickness in one or each of the parents. One of the most hard emotional activities for a baby to endure is the separation or dying of a mum or dad earlier than the age of eleven. Children that have skilled this match additionally demonstrate a greater chance of creating depression. [16]

Synthetic Chemicals:

Every day we take in artificial chemical compounds from all over. From preservatives, components and hormones that are determined and introduced to so many of our foods, pesticides that are sprayed and air and water air pollution as well. Studies have proven that air and water air pollution on my own can motive most cancers and different diseases. Synthetic chemical substances and pollution are now being more carefully seemed at as a hyperlink to despair and major depressive episodes. [16]

Noise pollution:

Noise air pollution has been linked to aggression, hypertension, increased stress levels, tinnitus, listening to loss and disruptions in sleep. Specifically, tinnitus is linked to panic assaults and forgetfulness. Continual exposure to noise air pollution has also been linked to cardiovascular ailment and

increased blood pressure. A man or woman with possible depressive Tendencies will turn out to be even more prone to depression With continual, extended exposure to noise pollution.[17]

Electrical Pollution:

We are continuously surrounded by using radio Waves in all places we go. Much of the electrical gear we Use works off of radio and these radio waves have been Found to result in melancholy and rage. The actual reasons as to why're no longer but recognised and in contrast to different kinds of environmental Causes of depression, electrical air pollution can't be seen, heard, Tasted, or felt. But, it does have a bad impact on our thinking Any body. [17]

Natural and Catastrophic Disasters:

Natural and catastrophic Disasters, such as hurricanes, earthquakes, or fires, and even Manmade mess ups such as bombings and battle can push an Already inclined individual into a extreme Major Depression. The National Centre for Environmental Health has located that People, who typically would no longer be a candidate for depression, Can come to be depressed after main lifestyles altering episodes, such as Their residence being destroyed in a herbal disaster.[17]

6. TREATMENT

Mild despair can be effectively dealt with either Medication or psychotherapy. Moderate to extreme depression May require an strategy combining medication and Psychotherapy.

Drug treatment:

0-65% of sufferers reply to the first Antidepressant. No specific antidepressant agent is gold standard to Another in efficacy or time to response. Choice can be guided with the aid of Matching patients' signs to aspect impact profile, presence of Medical and psychiatric co morbidity, and prior response. Relative fees can additionally be viewed (e.g., generics). UMHSPreferred dealers are Fluoxetine (generic) and citalopram (Celexa®)33. Patients handled with antidepressants have to be carefully Observed for feasible worsening of melancholy or suicidality, Especially at the starting of remedy or when the dose Increases or decreases.[18]



The therapeutic consequences of antidepressants are believed to be Caused with the aid of their results on neurotransmitters and Neurotransmission. The Monoamine Hypothesis is a organic Theory declaring that melancholy is prompted by way of the underneath exercise in The intelligence of monoamines, such as dopamine, serotonin, and Norepinephrine. In the Fifties the monoamine oxidase inhibitors(MAOIs) and tricyclic antidepressants had been by chance Discovered to be positive in the therapy of depression. The finding and different helping evidence led Joseph put up his paper

known as “The Catecholamine Hypothesis of Affective Disorders” in 1965. Schildkraut related low stages Of neurotransmitters with depression. Research into different intellectual Impairments such as schizophrenia additionally observed that too little Activity of positive neurotransmitters have been linked to these Disorders^{34,35,36}. The speculation has been a predominant focal point of Research in the fields like pathophysiology and pharmacotherapy For over 25 years. [19]

Frequent Initial Visits

Patients require widespread visits early in Treatment to assess response to intervention, suicidal ideation, Side effects, and psychosocial aid systems.

Continuation Therapy:

Continuation therapy (9-12 months After acute signs resolve) decreases the incidence of relapse Of foremost depression. Long time period upkeep or life-time drug Therapy have to be regarded for chosen sufferers based totally on their History of relapse and different medical features.

Education/Support:

Patient training and guide are Essential. Social stigma and affected person resistance to the prognosis of Depression proceed to be a problem.[20]

7. BEATING DEPRESSION NATURALLY

Natural remedies from the inside and out

Treating melancholy doesn't have to imply hours of counseling or days fueled by using pills. Those techniques can be effective; however you may also pick herbal techniques to raise your mood.

Exercise, mind-body therapies, and natural dietary supplements may also have the electricity to have an effect on your outlook and even alter your intelligence chemistry. Many of these redress are safe, however aren't constantly verified to be effective [21].

Exercise to pump you up

Regular bodily endeavor would possibly now not be the first element your health practitioner prescribes when they diagnose you with depression. However, perhaps it must be section of your therapy.

A Duke University learn about discovered that 30 minutes of average cardio exercising three instances a week was once as fantastic at relieving signs of melancholy in the quick time period as antidepressant medication.

The find out about additionally observed that despair used to be much less possibly to return in humans who persevered to workout after the preliminary trial. [22]

Finding ways to relax:

Depression can make you sense disconnected from the things you love. It additionally can motive fatigue and sleep problems. Unwinding can have a effective impact on your mood.[23]

Think about meditation:

Meditation is a shape of rest meant to clear your thought by using focusing on the breath, a word, or a mantra. Some studies Trusted Source advocate that each day meditation can assist alleviate stress, anxiety, and signs of depression.

Mindfulness practices, such as meditation, educate humans to focal point interest on the moment. This helps to domesticate an mindset of openness and acceptance, which may additionally have antidepressant effects. [24]

Shaping the body and mind with yoga

Yoga is a mind-body exercise. A yoga events strikes thru a collection of poses that assist improve balance, flexibility, strength, and focus. The poses are notion to:

- align the spine
- improve mental clarity
- rejuvenate the nervous system
- reduce stress
- promote relaxation and emotional wellness

Though extra lookup is necessary, some studies, together with research through the University of Westminster, exhibit that yoga may also be really useful for enhancing despair symptoms. [25]

What foods are good for helping depression?

There is no unique diet to treat depression, however eating more of some ingredients and less or none of others can help some human beings manage their symptoms

1. Selenium

Some scientists Trusted Source have counseled that growing selenium consumption would possibly assist enhance temper and decrease anxiety, which might also assist make melancholy extra manageable.

Selenium is present in a variety of foods, including:

- Whole grains
- Brazil nuts
- Some seafood
- Organ meats, such as liver[26]

2. Vitamin D

Vitamin D can also assist enhance the signs of depression, in accordance to a 2019 meta-analysis Trusted Source.

People achieve most of their diet D via solar exposure, however dietary sources are additionally important.

Foods that can provide vitamin D include Trusted Source:

- Oily fish
- Fortified dairy products
- Beef liver
- Egg[26]

3. Omega-3 fatty acids

The outcomes of some research have cautioned that omega-3 fatty acids may assist with depressive disorders.

However, the authors of a 2015 review Trusted Source concluded that greater research are critical to verify this.

Eating omega-3 fatty acids can also minimize the threat of temper issues and Genius illnesses with the aid of bettering talent characteristic and maintaining the myelin sheath that protects nerve cells.

Good sources of omega-3 fatty acids include Trusted:

- Cold-water fish, such as salmon, sardines, tuna, and mackerel
- Flaxseed, flaxseed oil, and chia seeds
- Walnuts[27]

4. Antioxidants:

Vitamins A (beta carotene), C, and E comprise supplies referred to as antioxidants.

Antioxidants assist eliminate free radicals, which are the waste merchandise of herbal bodily techniques that can construct up in the body.

If the physique can't do away with sufficient free radicals, oxidative stress can develop. A wide variety of fitness issues can result, which may additionally consist of anxiousness and depression.

The outcomes of a 2012 study Trusted Source recommended that ingesting the nutritional vitamins that furnish antioxidants might also decrease signs of nervousness in humans with generalized anxiousness disorder.

Fresh, plant based totally foods, such as berries, are true sources of antioxidants. A weight loss plan that is prosperous in clean fruits and vegetables, soy, and different plant merchandise may also assist limit the stress-related signs of depression.[28]

Side effects for Prolong Treatment:

The antidepressants are essential for the cure of depressive episodes in the acute segment when untreated signs and symptoms are at their worst. With long-term use, however, the brain units work compensating for the drug-induced modifications with a manner he calls oppositional tolerance. The brain tries to re-establish its usual stability of production, launch and reuptake of neurotransmitters – as each machine of the physique does when its normal functioning has been disturbed. The notion is that if the medication artificially jacks up the brain's degree of serotonin or norepinephrine, the neurobiology of the machine reacts by means of reducing its very own manufacturing of the neurotransmitter. In different words, if antidepressant use continues lengthy enough, the brain will create a gadget to cancel out its effect. There is an opportunity that antidepressant use itself may want to be inflicting the problem. There are unique neurobiological reactions that may want to account for the emergence of greater stages of resistance to treatment. In addition, there is proof that stopping antidepressants in people who no longer reply to them can lead to reversal of symptoms as the brain compensates as soon as more, this time for the withdrawal of the drugs. For some people, however, stopping the remedy has no effect. They proceed to have habitual depression. If antidepressant remedy is restored as a response, these patients can strengthen a permanently ordinary illness. Thesis tardive dysphoria. [29]

Alternative Treatments for Depression:

There is no proof that any choice therapy or domestic remedy is fantastic in treating reasonable to extreme depression. However, some human beings with slight despair might also discover advantage from domestic treatments via improved relaxation.

Relaxation can grant comfort from depressive symptoms. It can also assist cope with some of the reasons of depression, such as grief, anxiety, altering roles, and even bodily pain. If you have melancholy and are thinking about the usage of a choice shape of therapy, it is necessary to be trying to find the recommendation of the fitness care provider.

Examples of choice cures include: Acupuncture, Aromatherapy, Biofeedback, Chiropractic treatments, Guided Imagery, Herbal remedies, Hypnosis, Massage therapy, Meditation, Relaxation, Yoga, etc.[30]

8. CONCLUSION

Depression is a serious scientific circumstance and a profound public health concern. Although the improvement of despair is

likely due to a mixture of factors, appreciation the effects, possible triggers, and remedies of the sickness is crucial for

promoting the nicely being of affected individuals. There is additionally a need to learn about the path of depressive problems current in the world so as to decide the want and length of continuation treatment. Studies have to additionally consider the low cost fashions of therapy which can be without problems used in the main care putting to efficiently deal with depression.

REFERENCES

- [1] T. Ndam, "Family adaptation to developmental needs of their children with multiple disabilities: a comparative assessment study of some Swedish and Cameroonian families," *European Journal of Public Health Studies*, vol. 3, no. 1, 2020.
- [2] Kessler R.C., McGonagle K.A., Zhao S., et al., Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States, Results from the National Comorbidity Survey *Arch Gen Psychiatry*, 51, 8-19, (2003)
- [3] Robins L., Regier D., *Psychiatric Disorders in America*, New York: Free Press (2004)
- [4] Depression Guideline Panel. Depression in Primary Care: Volume 1. Detection and Diagnosis Clinical Practice Guideline, Number 5. Rockville, Maryland: U.S Department of Health and Human Services; AHCPR No. 93-0550 (2001)
- [5] Katon W. The epidemiology of depression in medical care, *Int J Psychiatry Med*, 17, 93-112 (2006)
- [6] Judd L.L., The clinical course of unipolar major depressive disorders *Arch Gen Psychiatry*, 54, 989-991 (2008)
- [7] Consensus Development Panel, NIMH/NIH Consensus Development Conference statement Mood disorders: pharmacologic prevention of recurrences, *Am J Psychiatry*, 142, 469-476 (2003)
- [8] American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* Washington, DC: American Psychiatric Association (2000)
- [9] Wells K.B., Stewart A., Hays R.D. et al., The functioning and well-being of depressed patients Results from the Medical Outcomes Study, *JAMA*, 262, 914-919 (2002)
- [10] Pennix B.W., Guralnik J.M., Ferrucci L., Simonsick E.M., Deeg D.J., Wallace R.B., Depressive symptoms and physical decline in community-dwelling older persons *JAMA*, 276, 1720-1726 (2007)

- [11] Howland R., General health, health care utilization, and medical comorbidity in dysthymia, *Int J Psychiatry Med* 23, 211-238 (2005)
- [12] Simon G.E., Von Korff M. and Durham M.L., Predictors of outpatient mental health utilization by primary care patients in a health maintenance organization, *Am J Psychiatry*, 151, 908-913 (2004)
- [13] Song F., Freemantle N. and Sheldon T.A., et al., Selective serotonin reuptake inhibitors: meta-analysis of efficacy and acceptability, *BMJ*, 306, 683-687 (2006)
- [14] Kessler R.C., Nelson C.B., McGongale K.A., Liu J., Swartz M. and Blazer DG., Comorbidity of DSM-IV major depressive disorder in the general population, Results from the US National Comorbidity Survey, *Br J Psychiatry*, 168, 17-30 (2006)
- [15] Regier D.A., Narrow W.E., Rae D.S., Manderscheid R.W., Locke B.Z. and Goodwin F.K., The de facto US mental and addictive disorders service system, Epidemiologic catchment area prospective 1-year prevalence rates of disorders and services, *Arch Gen Psychiatry*, 50, 85-94 (2005)
- [16] Pincus H.A., Tanielian T.L. and Marcus S.C., et al., Prescribing trends in psychotropic medications, primary care, psychiatry and other medical specialties, *JAMA*, 279, 526-531 (2007)
- [17] US Preventive Services Task Force. Guide to Clinical Preventive Services, 2nd ed, Alexandria, Va., International Medical Publishing, (2009)
- [18] American College of Physicians, ACP-ASIM Clinical Practice Guidelines: Current and Future Projects, Available at: <http://www.acponline.org/sci-policy/guidelines/projects.htm>. (2009)
- [19] 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, 450-454 (2004)
- [20] Banerjee S., Shamash K., MacDonald A.J. and Mann A.H., The use of the Self-CARE (D) as a screening tool for depression in the clients of local authority home care services—a preliminary study, *Int J Geriatr Psychiatry*. 13, 695-699 (2006)
- [21] Bashir K., Blizard R., Jenkins R. and Mann A., Validation of the 12-item general health questionnaire in British general practice, *Primary Care Psychiatry*, 2, 4-7 (2006)
- [22] D'Ath P., Katona P., Mullan E., Evans S. and Katona C., Screening, detection and management of depression in elderly primary care attenders, I, The acceptability and performance of the 15 item Geriatric Depression Scale (GDS15) and the development of short versions, *Fam Pract.*, 11, 260-266 (2004)
- [23] Fechner-Bates S., Coyne J.C. and Schwenk T.L., The relationship of self-reported distress to depressive disorders and other psychopathology, *J Consult Clin Psychol*, 62, 550-559 (2004)
- [24] Finlay-Jones R.A. and Murphy E., Severity of psychiatric disorder and the 30-item general health questionnaire, *Br J Psychiatry*, 134, 609-616 (2006)
- [25] Geisser M.E., Roth R.S. and Robinson M.E., Assessing Depression among persons with chronic pain using the Center for Epidemiological Studies-Depression Scale and The Beck Depression Inventory, a comparative analysis, *Clin J Pain.*, 13, 163-170 (2007)
- [26] Gerety M.B., Williams J.W. Jr. and Mulrow C.D., et al., Performance of case-finding tools for depression in the nursing home, influence of clinical and functional characteristics and selection of optimal threshold scores, *J Am Geriatr Soc.*, 42, 1103-1109 (2006)
- [27] Klinkman M.S., Coyne J.C., Gallo S. and Schwenk T.L., Can case-finding instruments be used to improve physician detection of depression in primary care, *Arch Fam Med.*, 6, 567- 573 (2007)
- [28] Leon A.C., Olfson M. and Weissman M.M., et al., Brief screens for mental disorders in primary care, *J Gen Intern Med.*, 11, 426-430 (2012)
- [29] Leung K.K., Lue B.H., Lee M.B. and Tang L.Y., Screening of depression in patients with chronic medical diseases in a primary care setting, *Fam Pract.*, 15, 67-75 (2009)
- [30] Lewinsohn P.M., Seeley J.R., Roberts R.E. and Allen N.B., Center for Epidemiologic Studies Depression Scale (CES-D) as a screening instrument for depression among community-residing older adults, *Psychol Aging.*, 12, 277-287 (2007)
- [31] Lustman P.J., Clouse R.E., Griffith L.S., Carney R.M. and Freedland K.E., Screening for depression in diabetes using the Beck Depression Inventory, *Psychosomatic Med.*, 59, 24 (2011)