Depressive Disorders in Indian Context: A Review and Clinical Update for Physicians

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Abstract
Depression is a common, treatable disorder which continues to remain under-detected in the primary care settings. With an average national deficit of 77% for psychiatrists in India, there is a need to mobilise more resources to deal with depressive disorders. Therefore, it is pertinent that the physicians are sensitised and trained for recognition and treatment of depressive disorders. Patients with mild to moderate depression, non-psychotic or somatised depression can be managed in primary care settings by general physicians. Unless specifically screened, depression may remain under-recognised and untreated in primary care/medical settings. The article reviews the available Indian research on depression and provides a clinical update to screen, diagnose and manage depression, especially aimed at physicians.

Background
Depression is a common, treatable disorder which continues to remain under-detected in the primary care settings. A large majority of patients with depression present to physicians with complaints of medically unexplained somatic symptoms, or masked depression. Further, the rates of depressive disorders are higher among the chronic medically ill persons and in primary care patients. In India, the average national deficit of psychiatrists has been estimated to be 77%,1 approaching over 90% in several states. There is a need to mobilise more resources for dealing with depressive disorders in Indian population. Therefore, it is pertinent that the physicians are sensitised and trained for recognition and treatment of depressive disorders.

In terms of public health significance, depression is the third leading cause of global disease burden, accounting for 4.3% of total disability-adjusted life years. If current trends continue, it will become the leading cause of disease burden by the year 2030.2,3 At an individual level, depression affects the mental and emotional wellbeing, lowers the overall quality of life and may increase the risk of other medical illnesses. It adversely affects the job and familial functioning. At a societal level, it leads to loss of productivity and economic burden. Though effective treatments are available, it continues to be an under-recognised and undertreated disorder.

Epidemiology
Recently conducted world mental health surveys indicate that major depression is experienced by 10-15% people in their lifetime4 and about 5% suffer from major depression in any given year.5 Lifetime prevalence of all depressive disorders taken together is over 20%, that is one in five individuals.

In Indian context, a recent large sample survey with rigorous methodology reported an overall prevalence of 15.9% for depression,6 which is similar to western figures. There is some suggestion that perhaps the prevalence of depression has increased over past few decades.7 Studies done in primary health care settings in India have found depression in 21-84% of the cases.8,9
Box 1: Depressive episode: Diagnosis and Clinical Features

A. At least 2 of following should be present for a minimum 2 weeks:
   1. Depressed mood to a degree that is definitely abnormal for the individual, present for most of the day and almost every day, largely uninfluenced by circumstances
   2. Loss of interest or pleasure in activities that are normally pleasurable
   3. Decreased energy or increased fatigability

B. Additional symptoms, two or more of the following:
   1. Loss of confidence and self-esteem
   2. Self-reproach or excessive and inappropriate guilt
   3. Recurrent thoughts of death or suicide, or any suicidal behaviour
   4. Diminished ability to think or concentrate
   5. Change in psychomotor activity (agitation or retardation)
   6. Sleep disturbances
   7. Change in appetite with corresponding weight change


The average age of onset for major depression is 24 years as per the recent epidemiological research, though it can begin at anytime throughout the lifespan. One of the consistent findings across almost all research studies is that women are twice as likely to have depression compared to males. Depressive disorders are much more likely among people who are unmarried, widowed, divorced or separated, or without close inter-personal relationships. Those residing in nuclear families and urban areas are possibly at a higher risk. Elderly age and presence of medical disorders pose an even higher risk of depression.

Aetiology

Current understanding of depression is based on a biopsychosocial framework, with an interplay of biological as well as psychosocial factors. Studies suggest that depressive disorders are heritable to some extent, with 1.5-3 times increase in risk among those with a family history of depression in first degree relatives. Those with a high familial risk tend to have an early age of onset and a recurrent illness. Few studies have also found genetic factors to play a role in depression and its treatment response. Many studies have implicated norepinephrine and serotonin as possible neurotransmitters involved in aetiology of depression. The alterations in the neuroendocrine system, sleep physiology, and immune systems have been found in depressed patients.

Stressful life events are one of common precedents in the first episode of depression, and may leave a person more vulnerable to develop subsequent episodes. Common life events associated with depression are loss of a parent in childhood, loss of a spouse and unemployment. Being a caregiver for a chronically disabled person in family may also increase the risk of depressive symptoms. Researchers have suggested the role of psychological factors e.g. faulty or distorted cognitions, with a triad of negative view of self, negative view of environment and negative view of future. Indian studies have suggested the role of poverty, marginalisation and other socio-economic adversities in increasing the likelihood of depression.

How to Differentiate Normal vs Pathological Mood States

A healthy person experiences a variety of mood states, including transient feelings of sadness. Depression is different from everyday mood fluctuations and short-lived emotional responses to situations. It is important to differentiate clinical depression from these more ubiquitous transient negative mood states. Though stressful events may precede both, but the sadness in the context of normality is often transient, non-pervasive and non-capacitating. In contrast, a clinically depressed state is:

- more intense and pervasive
- sustained for most of the time over several days, weeks or months (a 2 weeks cut-off is generally considered for formal diagnosis)
- accompanied by an intense guilt or hopelessness for future
- may be accompanied by suicidal ideation or thoughts of self-harm
- associated with impairments of various bodily functions e.g. appetite, sleep disturbances
- interfere with familial, social and occupational functioning

Clinical Features

The diagnosis of depression is based on a set of specific signs and symptoms (Box 1). A clinician needs skills and experience to elicit these symptoms. The key symptoms of depression are:

a. a persistently depressed mood;
b. a loss of interest in activities which were earlier considered as pleasurable; and
c. easy fatigability.

Several additional symptoms are also shown in box 1, some or all of which may be present. Disturbances in sleep, appetite and sexual drive are often seen in depressed patients. There may be frequent awakenings, dreams/nightmares and tendency to wake up earlier in mornings (about 2 hours before the usual time). Many a times, a person may not report sadness of mood, but instead may describe it to be irritable, blue, down, or
an agonising emotional pain or even an inability to cry or experience emotions. Anxiety symptoms may commonly occur e.g. feeling palpitations, restlessness etc.

Indian patients with depression appear to have a high prevalence of physical or somatic symptoms compared to western settings. Somatic symptoms such as body aches or vague pains are the one of commonest manifestations of depression in India. These have been considered to be a depressive equivalent symptom, more often seen in Asian cultures. A depressed person may present with various complaints e.g. ‘I have this dull headache or body pains’ or ‘I get tired easily’.

More than half of the depressed subjects may have suicidal ideation. In an Indian study, 16% of depressed subjects with suicidal ideation had a suicidal attempt and risk was especially higher for individuals less than 30 years of age, single men, married women, students and those with higher education. Further, depressed subjects who have attempted suicide in past are at higher risk of indulging in suicidal behaviour in future.

Depression may range from mild, moderate or severe depending on the number and severity of depressive symptoms. Some of severely depressed patients may have excessive inappropriate guilt or other psychotic symptoms e.g. hearing voices, suspiciousness etc. Patients with severe or psychotic depression need a referral to a psychiatrist for management.

**Depression in Medically Ill Persons**

Presence of a chronic medical illness e.g. hypertension, diabetes, migraine etc increases the risk of depression, and is often associated with incomplete recovery and frequent relapses of depressive episodes. Conversely, the co morbid depression has a negative impact on the course of medical illness, leading to 2-3 times increased risk of mortality from cardiovascular illnesses.

The prevalence of depression in the period after myocardial infarction or stroke has been estimated to be 20%. Those who had a depressive episode shortly after stroke were 3.4 times more likely to have died at the 10-year follow up compared to stroke patients who did not develop depression.

A study at a tertiary care centre from India assessed patients with type 2 diabetes for anxiety/depression. It was observed that body mass index had a significant correlation with depression scores. Another Indian study on glaucoma patients found that 9% of patients using topical timolol screened positive for depression, underscoring the need for adequate recognition in such cases. An increased prevalence of depression is found in patients suffering from parkinson’s disease or dementia. As many as one fourth to half of dementia patients experience clinical depression during the course of illness.

**Course and Prognosis**

Untreated, a depressive episode may last between 6-12 months and with treatment, most of the episodes resolve over a few weeks. Depression may be a chronic and recurrent illness in at least one-half to two-thirds of the patients who usually have the next episode in less than five years. With time, a person may start to have more frequent episodes which last longer. There may be average of 5-6 episodes of depression in lifetime, though it varies from person to person.

A good prognosis may be indicated by milder episodes, good social support, stable familial and social functioning before onset of depression, absence of a comorbid medical or psychiatric disorder, while patients with a younger age of onset, co-existing medical illness, substance use or anxiety disorder, multiple episodes or poor functioning in the premorbid period are likely to have a poorer prognosis.

**Screening for Depression in Primary Care/Medical Settings**

A physician may experience resistance from the patient on an abrupt suggestion of a psychiatric enquiry. It may be useful to approach the subject gradually beginning with questions pertaining to biological functions (sleep, appetite) followed by behavioural and mood changes, if any. In addition to depression, any signs and symptoms of anxiety or use of alcohol or any other substance to mask depressive symptoms should be explored. Patient should be given adequate time to respond. Care must be given to the appearance, behaviour or mood of patient as objectively observed by the physician.

Studies have suggested that in busy, clinical settings the use of as little as following two questions may be an alternative (sensitivity: 85%; specificity: 66%) to longer instruments to detect depression.

- **Over the past 2 weeks, have you felt down, depressed, or hopeless?**
- **Over the past 2 weeks, have you felt little interest or pleasure in doing things?**

Two brief screening instruments have been found to be quite useful for screening depression in medical settings. These are available free of cost in public domain:

- Patient Health Questionnaire-depression module (PHQ-9): It is a 9-item scale, each item rated between 0-3 based on frequency. Sensitivity and specificity are both 88%, with a cutoff score of 10.
- Patient Health Questionnaire -2 (PHQ-2): A 2-item
Table 1: Common antidepressant medications to treat depression in primary care

<table>
<thead>
<tr>
<th>Generic name</th>
<th>Usual daily dose (mg)</th>
<th>Common side effects</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selective Serotonin Reuptake Inhibitors (SSRIs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Escitalopram</td>
<td>10-20 mg</td>
<td>SSRIs may cause nausea, headache, anorexia, restlessness, agitation, insomnia, sedation, g.i. distress, sexual dysfunction.</td>
<td>Minimal drug-drug interactions, relatively safer</td>
</tr>
<tr>
<td>Sertraline</td>
<td>50-150 mg</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>Fluoxetine</td>
<td>20-40 mg</td>
<td>Long half-life, high chance of drug interactions</td>
<td></td>
</tr>
<tr>
<td>Paroxetine</td>
<td>20-40 mg</td>
<td>May cause sedation, preferred at nighttime</td>
<td></td>
</tr>
<tr>
<td>Serotonin Norepinephrine Reuptake Inhibitors (SNRIs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duloxetine</td>
<td>30-60 mg</td>
<td>Nausea, restlessness, insomnia</td>
<td>May be preferred in patients with prominent somatic symptoms</td>
</tr>
<tr>
<td>Mirtazapine</td>
<td>15-30 mg</td>
<td>Sedation, weight gain</td>
<td>No sexual dysfunction</td>
</tr>
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Noradrenergic and Specific Serotonergic Antidepressant (NASSA)

*List of medicines/side effects is not exhaustive; Dose may be kept on lower side for medically ill or elderly patients

version similar to the PHQ-9 that inquires about the frequency of depressed mood and anhedonia over the past 2 weeks. It is able to detect major depression with a sensitivity of 83% and a specificity of 92% (using a cutoff score of 3). 37

Some other screening instruments are available viz. Zung Self-Rating Depression Scale and Beck Depression Inventory- II. A patient may complete the self-rated screening instruments while waiting for his or her turn in the physician’s out-patient clinic.

Two depression screening tools specifically address the problem of transdiagnostic symptoms (symptoms which may overlap between medical disorder and depression ) by excluding the somatic content or physical symptoms to enhance usefulness in persons with physical illness.

- Beck Depression Inventory-Primary care (BDI-PC) (7-item) 38
- Hospital Anxiety and Depression Scale (HADS) (7-item) 39 (in public domain)

**Management of Depression**

Patients with mild to moderate depression, non-psychotic or somatised depression can be managed in primary care settings by general physicians. Unless specifically screened, depression may remain under-recognised and untreated in primary care/medical settings.

The W.H.O. mhGAP Intervention Guide 40 has outlined the treatment options for depression, which consist of basic psychosocial support combined with antidepressant medication or psychotherapy. For patients with mild or subthreshold depression, treatment may entail psychological support, problem-solving, exercise, informal counseling, or formal psychosocial interventions. In a country like India, where only few clinicians have expertise and time to carry out extensive and structured psychotherapies, supportive psychotherapy may be provided. For moderate depression, anti-depressant medication (in combination with psychotherapy) is the mainstay of treatment.

Selective Serotonin Reuptake Inhibitors (SSRIs) are common initial choice to treat depression in view of their ease of use, more tolerable side effects, superior safety profile and overall efficacy safety (Table 1). 41 Most systematic reviews have not shown any clinically significant differences in efficacy among antidepressants, but there are some clinical factors that are important to consider when choosing a medication e.g. past response, adverse effect profile, comorbid conditions, drug-drug interactions, cost etc. 41,42 Fluoxetine is most economical and effective medication, which may be preferred in an otherwise healthy adult with depression. Escitalopram is preferred over fluoxetine in patients with multiple other medications/medical illnesses because of low propensity to cause drug interactions. More sedating SSRIs e.g. paroxetine may be preferred in patients with marked anxiety and insomnia. Sertraline has been more extensively studied in patients with cardiac conditions and post-stroke depression. Generally, it is advisable to start at a lower dose and increase gradually (start low, go slow), however patients must be given adequate dose of SSRI to ensure a remission of symptoms. Medications usually takes 4-6 weeks for improvement in clinical symptoms. Physician should emphasise on frequent follow up visit during the initial few weeks to monitor for depressive symptoms and adverse effects, if any. Some simple clinical messages can be provided at first and each follow up visit (Box 2).

In spite of adequate pharmacological treatment and support, some patients may not respond to treatment. These patients may need a change of SSRI after an adequate trial of first medication. It is also advised to refer such patients for a review of diagnosis and treatment plan to a psychiatrist.

In view of the chronic and recurrent nature of depressive disorders, treatment should be continued for at least 6-12 months after the remission of depressive episode is achieved. This continuation phase of treatment comprising helps in minimising the risk of future recurrence. In case of multiple prior
Box 2: Simple clinical points to guide physicians treating depression in primary care

- Try and build a therapeutic relationship / rapport with patient
- Provide psychoeducation to the patient and family members about the disorder and need for treatment
- Convey that it may take 2-4 weeks (at times, more) for discernible improvement in symptoms
- Monitor the patient at least biweekly in initial phase of treatment to monitor depressive symptoms
- Ensure adequate compliance
- Keep the dosing regime simple and convenient, preferably once daily
- Ensure an active, healthy lifestyle
- Address myths related to anti-depressants e.g. these are addictive
- Ask the patients to maintain a mood diary
- Encourage them to engage in problem-solving strategies
- Provide support and reassurance
- Involve family members in the treatment process
- Identify the situations needing referral

episodes or high familial risk, maintenance treatment should be considered strongly for initial few years.

Referral to a Psychiatrist

During screening or follow up of the patient, following situations require a referral to a psychiatrist for management:

- Risk of suicide
- Severe depression: presence of all or almost all depressive symptoms listed in diagnostic criteria; extreme psychomotor retardation etc
- Presence of psychotic symptom e.g. delusions and hallucinations
- Non-response to treatment, chronic resistant depression
- Presence of multiple comorbidites e.g. depression, alcohol abuse, diabetes etc
- Presence of multiple, complicated polypharmacy
- Presence of a significant individual, marital and/or family stressor, needing a more intensive psychotherapy
- Special population groups e.g. adolescent depression; or pregnant women
- Diagnostic difficulty; or suggestion of a possible hypomania/manic episode in the past or family history.

Conclusion

Depression is a chronic, pervasive and disabling illness, which can result from a combination of various biological and psychosocial factors. The persons with chronic medical conditions are at an especially high risk to develop depression and conversely, untreated depression is likely to have an adverse impact on course and outcome of the medical condition. Early recognition and timely management serves to reduce the disability and even the risk of suicide. Safe and effective treatments are available for depression. Trained general physicians should be able to identify and effectively manage the mild to moderate cases of depression using a combination of pharmacotherapy and psychosocial treatments in the primary care/medical settings.

References


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