Depressive symptoms are very common among the medically ill. Frequently, however, depression in these people goes unrecognized and untreated. Mild-to-moderate depression (dysthymia) is more prevalent in people with sleep disorders, chronic fatigue, hypothyroidism and somatoform disorders.

Mild-to-moderate depression is found in 45% of people with chronic insomnia, up to 60% of women with premenstrual syndrome and up to 50% of people experiencing chronic pain. Prevalence rates associated with major illnesses are listed in the table at right.

Overall, 28% of people with mild-to-moderate depression have incapacitating medical conditions. People with dysthymia also use medical treatment facilities at higher rates than individuals without psychiatric disorders.

When depression and a medical condition co-exist, there are several possible explanations:

- **The medical disorder causes the depression** (i.e., hypothyroidism, mononucleosis, head injury, multiple sclerosis, Parkinson’s disease, HIV/AIDS, etc.)

- **The medical condition is found with a higher than expected rate of concurrent depression** (i.e., coronary heart disease, cancer, diabetes, post-partum depression etc.)

- **The medical disorder triggers a major depressive episode** in those already genetically vulnerable to depression.

- **The perceived severity of the illness causes depression** (i.e., the reaction to dealing with a chronic illness or cancer.

- **Depression is caused by side effects of treatment for the primary illness.**

- **The medical disorder and the depression are not linked.**

### Prevalence of Depression

<table>
<thead>
<tr>
<th>Setting or Disease</th>
<th>Prevalence Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient</td>
<td>2-15%</td>
</tr>
<tr>
<td>Inpatient</td>
<td>12%</td>
</tr>
<tr>
<td>Cancer</td>
<td>6-39%</td>
</tr>
<tr>
<td>Cardiovascular Disease</td>
<td>15-25%</td>
</tr>
<tr>
<td>Rheumatoid Arthritis</td>
<td>13%</td>
</tr>
<tr>
<td>Parkinson’s Disease</td>
<td>10-37%</td>
</tr>
<tr>
<td>Stroke</td>
<td>22-50%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>24-33%</td>
</tr>
</tbody>
</table>

### Some Drugs Associated with Depression

**Definite causal relationship:**
- High-dose reserpine
- High-dose glucocorticoids
- Anabolic steroids
- Cocaine (withdrawal)
- Amphetamines (withdrawal)

**Possible causal relationship:**
- Oral contraceptives
- Interferon
- Sedative hypnotics
- Carbamazepine
- Digoxin
- Antihyperlipidemic agents

### Psychosocial Risk Factors for Depression

- Poor pre-morbid coping skills
- Conforming personality style
- Tendency to pessimism
- External locus of control
- Social isolation
- Personal history of depression
- Personal history of substance abuse
- First degree relative with history of cancer or depression
- Recent losses
- Socioeconomic pressures
Depression and Heart Disease

- Depression is an independent risk factor for the development of heart disease, not just an emotional reaction to heart disease itself.
- Depression significantly increases the risk of developing coronary artery disease in both middle-aged and elderly populations.
- Depressed feelings can be a common reaction to heart disease, but clinical depression is not an expected reaction. It is critical to treat both the depression and cardiac disorder to maximize a positive outcome and minimize morbidity and mortality.
- 40 to 65% of patients with coronary heart disease and a history of heart attack experience depression.
- 19 to 24% of patients with coronary heart disease without a previous history of heart attack experience depression.
- Patients who are depressed after a heart attack experience a 6-month and 18-month mortality rate 3.5 times and 5 times higher than those who are not depressed, respectively.
- Using an inclusive approach is generally recommended when making a diagnosis, so depression is not missed. In this approach, somatic symptoms are included in the assessment of depression, whether or not they can also be attributed to the coronary heart disease.
- Patients with both coronary heart disease and depression have twice the reduction in social functioning associated with either condition alone.
- Depression in patients with coronary heart disease is associated with treatment noncompliance, including medications and cardiac rehabilitation.

Depression and Diabetes

- Approximately one in five (19 to 27%) patients with type 1 or type 2 diabetes suffers from major depression.
- The odds of co-morbid depression are significantly higher for women than for men.
- The prevalence of depression among people with diabetes during their lifetime is 3 times higher than for the general U.S. population. However, depression is identified and treated in fewer than one-third of cases.
- The relapse rate for depression in patients with diabetes is 8 times higher than for depressed patients who are physically healthy.
- Evidence suggests that major depression is limited to patients with a pre-existing vulnerability, not necessarily related to the diabetes itself.
- Depression doubles the risk of incident type 2 diabetes independent of its association with other risk factors.
- Depression in patients with diabetes is associated with:
  - Treatment noncompliance
  - Missed appointments
  - Poor glycemic control — the principle cause of diabetes complications
  - A positive correlation between the severity of the depression and poor glucose control.

Depression and Stroke

- 10 to 27% of stroke victims have a concurrent major depressive disorder lasting approximately 12 months.
- 15 to 40% experience depressive symptoms.
- Major depressive disorder significantly impacts rehabilitation motivation.
- Factors affecting the likelihood and severity of depression include:
  - Location of the brain lesion
  - Family history of depression
  - Prior depressive episodes
  - Prestroke social functioning

Depression and Cancer

- 25% of people with cancer have depression, but only 2% of cancer patients in one study were receiving antidepressant medication.
- People with cancer (and their doctors) frequently misinterpret signs of depression, attributing them to the cancer itself.
- Several factors increase the likelihood that depression will co-occur with cancer:
  - Advanced phases of the disease
  - Uncontrolled pain
  - Disability or disfigurement
  - Medications (chemotherapy agents)
  - Social isolation
  - Socioeconomic pressures
- Patients who are depressed after a heart attack experience a 6-month and 18-month mortality rate 3.5 times and 5 times higher than those who are not depressed, respectively.
- Using an inclusive approach is generally recommended when making a diagnosis, so depression is not missed. In this approach, somatic symptoms are included in the assessment of depression, whether or not they can also be attributed to the coronary heart disease.
- Patients with both coronary heart disease and depression have twice the reduction in social functioning associated with either condition alone.
- Depression in patients with coronary heart disease is associated with treatment noncompliance, including medications and cardiac rehabilitation.

Prevalence of Depression in Cancer Patients

<table>
<thead>
<tr>
<th>Cancer Site/Type</th>
<th>Prevalence Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pancreas</td>
<td>50%</td>
</tr>
<tr>
<td>Oropharynx</td>
<td>22-40%</td>
</tr>
<tr>
<td>Breast</td>
<td>10-26%</td>
</tr>
<tr>
<td>Colon</td>
<td>13-25%</td>
</tr>
<tr>
<td>Gynecologic</td>
<td>23%</td>
</tr>
<tr>
<td>Lymphoma</td>
<td>17%</td>
</tr>
<tr>
<td>Gastric</td>
<td>11%</td>
</tr>
<tr>
<td>Acute Leukemia</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

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