By Eamonn Brady (MPSI)

Conditions which mimic & cause psychiatric disorders

The aim of this article is to discuss conditions that cause or mimic mental health disorders (also called psychiatric disorders). However, there are certain cases where the opposite is the problem, meaning that psychological factors can contribute to physical disorders.

There are four possible explanations for this:

1. Unhealthy habits may result from the psychological disorder including over-eating, smoking and overuse of alcohol
2. Psychological disorders may result in hormonal and neurological changes and may affect the immune system. For example, evidence suggests that those suffering from psychological disorders are more at risk of heart attack.
3. Perception may play a role, for example, those suffering from depression tend to experience pain more severely when depressed.
4. Psychological factors can determine if a person sees a doctor, for example a person who would not visit a doctor for joint pain may do so when depressed.

Psychological complications of physical disorders

Some studies suggest that approximately half of people with a serious mental illness have general medical conditions that are largely undiagnosed and untreated and may cause or exacerbate the mental health problem.

The three most common mental health issues caused by physical illness include depression, anxiety and fatigue. Most anxiety and depression associated with physical illness is part of the psychological reaction to being ill. (eg) the feeling of being unwell or incapacitated gets you down. However, several medical disorders can cause anxiety and depression directly through their effect on the body.

Physical conditions which cause depression include cancer, infections, neurological disorders such as Multiple Sclerosis (MS) and Parkinson's disease and endocrine disorders such as hypothyroidism.

Delirium

Delirium is a state of confusion, disorientation and impaired consciousness. It is often a temporary mental state that often accompanies physical illness. It occurs in about 10 to 15% of patients in general medical or surgical wards in hospital and about 20 to 30% of patients in surgical intensive care units. It is more common in the elderly. Behaviour includes over-activity, irritability though some people tend to be underactive. Thinking is slow and muddled. Mood can is anxious, irritable or depressed. There can be visual hallucinations and perception may be distorted with misinterpretations. Amnesia often occurs so the patient may not remember the event when they recover.

Patients need reassurance and reorientation to reduce anxiety and disorientation. When linked to physical illness, it is generally short term. There should be a predictable and consistent routine for the patient and as few drugs as possible should be given to the patient as drugs can increase disorientation, especially drugs that can cause disorientation such as tranquillisers. The commonest cause of delirium in the elderly is infections of the urinary tract, chest, skin or ear; cardiac failure; side effects of drugs and strokes. Severe constipation, alcohol withdrawal and head injuries are other possible causes.

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Conditions which mimic depression

Typical symptoms of depression include low energy, lack of interest in things once found pleasurable, fatigue and difficulty concentrating. Over the next 20 years, depression is expected to be the second leading cause of disability worldwide and the leading cause of disability in high-income nations such as Ireland. Most depression is not caused by another illness and some people are ore genetically prone to it. However, there are occasions when people suffer from depression caused by another illness.

Two medical conditions that most commonly show up as depression are hypothyroidism (mainly in women) and low testosterone levels (in men). These medical disorders can mimic depression as many of their symptoms are similar to the symptoms of depression. They can also cause depression, but have distinctly different causes from clinical depression and must be treated in a different manner from conventional clinical depression.

Hypothyroidism

Low levels of thyroid hormone (hypothyroidism) can cause depression while high levels (hyperthyroidism) can cause anxiety and agitation. In situations like this, it is not the mental health problem that needs treating with anti-depressants or mood stabilisers; it is treatment of the underlying cause that is needed. The key is early diagnosis of the underlying cause.

Hypothyroidism should be considered when a person presents with first time depression, especially in those who have no previous history of depression. This is especially the case in women as hypothyroidism is more common in women. Many of the symptoms of hypothyroidism are similar to depression. These include lethargy or fatigue, sleepiness, lack of motivation, loss of enjoyment in things which use to be enjoyable, negative mood states (e.g., sadness, regret, guilt or anger), mood swings, and weight gain. Both hypothyroidism and depression are associated with physical pain in the joints and muscles. As many of the symptoms of hypothyroidism mimic depression and it is sometimes under-diagnosed, or misdiagnosed as depression. Anti-depressants will be ineffective for depression type symptoms in patients suffering from hypothyroidism. More detailed information on hypothyroidism written by pharmacist Eamonn Brady can be viewed at our website (www.whelehans.ie) or ask our staff for more detailed info.

Low testosterone levels in men

Lack of energy and sexual function is considered by many men as a natural part of ageing; to a certain extent it is. However, in many cases it is caused prematurely by a significant fall in testosterone levels which is easily diagnosed and treated. There are many possible causes of low testosterone including damage to the testicles by physical injury, mumps or genetic reasons or there may be a problem with the pituitary gland in the brain which regulates the release of hormones.

Low testosterone levels can be misdiagnosed as depression in men. Symptoms of testosterone deficiency include difficulty attaining or maintaining an erection, lack of sex drive, irritability, mood swings, negative mood states (e.g., sadness, regret, or anger), difficulty concentrating, lethargy and fatigue, a lack of motivation, and weight gain. Testosterone levels should be checked in men who present with these symptoms, especially if there is no previous history of depression and if they are over 35 (low testosterone levels are more common in over 35’s)

A slow decrease in testosterone is normal for men over 40, but sometimes there is an unusually sharp drop in testosterone levels and it is this that will lead to depression-type symptoms. If there is a sharp drop in testosterone, other symptoms which indicate low testosterone levels is the problem and hence warrant a testosterone check include:

- Development of fatty tissue in the breast/ chest area
- Accelerated hair loss
- Increased heart disease risk
- Susceptibility to fractures

Like hypothyroidism, anti-depressants will be ineffective for depression type symptoms in men suffering from low testosterone levels. Treatment involves testosterone replacement treatment given as an intramuscular injection administered every 2 or 3 weeks or a patch or gel applied to the skin.

Other conditions that cause or mimic psychiatric disorders

Insomnia

Insomnia is a caused by depression in many cases. At least 80% of depressed people experience insomnia which can be difficulty falling asleep or, most often, staying asleep. Early morning awakening is classic indication of depression. About 15% of depressed people sleep excessively.

Sleep disorders, such as on-going insomnia or sleep apnoea, can contribute to depression and make it more resistant to treatment. There is some evidence that insomnia or poor quality sleep precede depression by five weeks so it may be a cause in some cases.

Sleep Apnoea

Sleep apnoea is a condition that causes snoring, interrupted breathing and fragmented sleep. Sleep apnoea is caused by the muscles and soft tissue in the back of the throat collapsing inwards during sleep. These muscles support the tongue, tonsils and soft palate. Once the muscles relax; the airways narrows or become totally blocked. This interrupts the oxygen supply to the body, which triggers the brain to pull the person out of deep sleep so that the airway reopens and they can breathe normally again. The person will not remember this form of sleep disturbance. Sleep apnoea is more common in men, is often associated with being overweight but other factors such as diabetes, smoking and alcohol can exacerbate it. It leads to an unsatisfying form of sleep with the person feeling tired and lethargic the next day; however they often do not understand why they are tired as they will feel they slept soundly throughout the night. Sleep apnoea can increase risk of heart disease including heart attack and stroke.

Up to 20% of all people presenting with depression may also have sleep apnoea, and vice versa. A complicating factor is that the effects of depression and sleep apnoea can be difficult to distinguish. Sleep disruption can be a risk factor for developing depression, and a lot of symptoms people have due to sleep apnoea such as feeling lethargic and not being able to think clearly are similar to the symptoms of depression.

There are several ways of treating sleep apnoea including airway pressure masks that can be placed over the nose and mouth while sleeping to keep the upper airway passages open. Surgery is available to remove excess tissue around the nose and throat that can cause snoring and block air passages.

Alcohol abuse

Alcohol is safe in moderation, however overuse or abuse of alcohol can cause fatigue and fuzzy-headedness, which are similar symptoms experienced during depression. On the other side of the coin, an underlying cause of alcohol abuse can be depression.

Put simply, regularly drinking too much including (including ‘binge drinking’) causes depression or drinking heavily may be a mechanism to try to relieve anxiety or depression.

Alcohol addiction has a major link to depression. Studies reveal that the presence of either disorder (alcohol addiction or depression) doubled the risks of the second disorder. Studies show that alcohol addiction causes depression to a greater extent than depression causes alcohol addiction. Anxiety often accompanies heavy drinking (during the “comedown” or hangover period) which accentuates depression. Alcohol abuse is often overlooked by health professionals by those presenting with depression. Part of this problem is under reporting of the extent of problem drinking due to feelings of shame associated by some suffering with an alcohol problem.

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Illnesses such as chronic infections

Some acute (short term) and chronic (long term) infections can trigger depression. Certain viral infections, for example glandular fever and influenza (flu) can trigger depression in vulnerable individuals. The biological explanation of this is thought to be down to the fact that with infections, the body releases cytokines. Cytokines are signalling molecules released by the immune system as a response to infection and stress. Cytokines related to inflammation are thought to be a cause of depression.

A person with a physical illness may show depressed mood, anorexia, weight loss, sleepiness and altered sleep patterns, fatigue and retardation of motor activity, reduced interest in the physical and social environment, and impaired cognitive abilities.

The effect on our mood during illness such severe infection is primarily due to the general feeling of being unwell and the disability caused by the illness; however, research now shows that the immune system response (ie. released cytokines) by our body during illness may play a role in the resulting depression.

Many non-infectious conditions are also associated depression which may also be partly due to immune system response. People with these diseases have a high incidence of depression. These include:

- Autoimmune diseases: multiple sclerosis, rheumatoid arthritis, systemic lupus erythematosus, and allergies
- Stroke
- Trauma (eg) head injuries
- Alzheimer disease
- Other neurodegenerative diseases (eg) Parkinson’s, Huntington’s
- Cancer

Depression associated with these conditions respond well to counselling and anti-depressant therapy. Both tricyclic antidepressant medications and selective serotonin-reuptake inhibitors are of proven value in treating depression associated with a wide range of conditions. These include multiple sclerosis, stroke, Alzheimer’s disease, cancer and HIV infection.

Parkinson’s disease

About 40% of people with Parkinson's disease will suffer from at least one major episode of depression. Many of the symptoms of depression experienced by those suffering from Parkinson’s disease can be worse than depression in those not suffering from Parkinson’s.

Depression is often under diagnosed in those with Parkinson’s because some of the symptoms of Parkinson's disease are similar to those of depression. For example, slow movements and reduced speech occur in both depression and Parkinson's disease. Evidence indicates that the increased occurrence of depression in Parkinson's disease results from both the direct effects of the disease on the brain (degeneration of dopamine fibres in the brain) and the impact of the condition on the sufferer's everyday life.

Autoimmune inflammatory conditions

Depression is more common in those suffering with arthritic conditions like rheumatoid arthritis and fibromyalgia than the general population. It is estimated that up to 50% of fibromyalgia patients also suffer from depression. The reason for the high rate of depression in people with fibromyalgia is not fully understood. However, there are a few theories. For example, people suffering from fibromyalgia have lower levels of neurotransmitters such as serotonin in the brain leading to depression. The fact the fibromyalgia leads to frequent and debilitating pain and fatigue is likely to be a major cause of depression. Antidepressants such as SSRIs and Tricyclic’s play a major role in the treatment of fibromyalgia.

People with rheumatoid arthritis (RA) are thought to be twice as likely to suffer from depression. The obvious reason for this is the chronic pain and disability associated with RA. However, the link is thought to be more complex than that, with the inflammation itself contributing to changes in the brain which leads to depression. More detailed information on Rheumatoid Arthritis written by pharmacist Eamonn Brady can be viewed at our website (www.whelehans.ie) or ask our staff for more detailed info.

Chronic fatigue syndrome (CFS)

Chronic fatigue syndrome (CFS) is also called myalgic encephalomyelitis (ME). Its main symptom is extremely severe and long-term tiredness or fatigue. Other symptoms include muscular pains, joint pains, headaches, sore throats, swollen glands, disturbed sleep patterns and poor concentration. Most sufferers of the condition have at least one of these symptoms as well as chronic fatigue. It is thought to affect about 1 in 300 of the population however this may be an underestimate as it is often misdiagnosed. It is often misdiagnosed as depression due to the fact that many of its symptoms are similar to the symptoms of depression. It is important to get diagnosis correct as antidepressant therapy is not the mainstay of treatment for CFS. More detailed information on Chronic Fatigue Syndrome written by pharmacist Eamonn Brady can be viewed at our website (www.whelehans.ie) or ask our staff for more detailed info.

Dementia

People with dementia suffer from more depressive illnesses than other people. Depression more frequently occurs in some forms of dementia, eg dementia with Lewy bodies (DLB). The difficulty people with dementia have in communicating their distress means the depression can be missed and not treated. The development of features, such as a loss of interaction and interest in others and a sense of gloominess, may mean that a depressive illness is developing and help should be sought.

With dementia, the mood varies; mood tends to be predominantly depressed, flattened and unpredictable. On occasions it can be euphoric (the person can appear to be on a high). Many dementia patients sleep poorly at night, waking disorientated and distressed. Personality change may occur, often with an exaggeration of less favourable traits.

In the elderly, dementia can be sometimes misdiagnosed as three different psychiatric disorders. These are:

- Delirium- a state of impaired and fluctuating consciousness, misinterpretations and visual disturbance
- Mood disorders- Depression and euphoria (less frequent)
- Paranoid states- paranoia is most commonly a feature of mood disorders and dementia

To ensure correct diagnosis, the person should be referred by their GP to a specialist in psychiatry of the older person.

Treatment of dementia related psychiatric disorders

Medication is useful only for specific psychiatric disorders associated with dementia including depression, anxiety and paranoia. Sleep disturbance is best managed by avoiding caffeine and other stimulants, increasing daytime activities and reducing daytime sleep or naps. Antipsychotic drugs such as mood stabilisers are generally considered last resort for severe disturbance in dementia patients. In most cases, the treatment of depression in the elderly is the same as for younger patients. To reduce the incidence of side effects, the starting dose of antidepressants should be half that of younger patients and it may be given more than once a day.

More detailed information on Dementia written by pharmacist Eamonn Brady can be viewed at our website (www.whelehans.ie) or ask our staff for more detailed info.

Multiple Sclerosis

Depression is more common with Multiple Sclerosis (MS). It's not clear how much of the depression arises from the effects of the disease on the brain and how much results through the consequences of the disability. Depression and elation may occur and sometimes may be severe enough to warrant treatment. In most cases, deterioration of important brain functions such as memory occurs late in the condition and progresses slowly. In late stages of MS, dementia is common.

Epilepsy

Psychiatric problems are not normally associated with epilepsy. However, there can be a temporary change in mood and psychiatric state associated with the seizure.

However, some behavioural disturbance may be associated with the seizure. Before a seizure there may be a period of increasing tension, irritability and depression lasting from a few hours to a few days. Rarely there can be a period of abnormal behaviour and impaired awareness for a prolonged period after the seizure. The drugs used to treat epilepsy may cause impaired attention. In some patients there is persistent abnormal electrical activity in the brain between seizures and this can be associated with poor attention and memory.

Strokes

There is evidence that depression can be triggered by vascular conditions such as stoke due to damage the area of the brain involved in mood and emotion (ie) orbitofrontal cortex. This is a similar explanation of the increased prevalence of depression in Parkinson’s patients.

Among those who survive a stroke, about half return to a fully independent living. The rest may have physical as well as psychological problems. The psychological problems are often the more significant, preventing a return to a normal life when physical disability has ceased to be a serious obstacle. Cognitive impairment can include speech impairment and swallowing difficulties. Personality change can include irritability, apathy, unpredictable or erratic behaviour. Mood can be unpredictable. Even though biological factors contribute to depression in stroke patients, anti-depressants are treatment of choice.

Cancer

Mental health problems resulting from the diagnosis of cancer is rare. Distress is particularly likely to occur at particular points of a person’s experience with cancer. This includes the diagnosis, during treatment (surgery, chemotherapy or radiotherapy) and if terminal disease recurs.

Brain Tumours

Many brain tumours cause psychological symptoms at some stage and in some cases these are the first symptoms to appear which leads to diagnosis. Fast growing tumours are more likely to cause delirium (confusion, disorientation and impaired consciousness) and while slow growing tumours are more likely to present with dementia and occasionally depression.

Head injuries

Brain damage may result in personality change and may be severe enough to be classified a personality disorder. A distinctive syndrome associated with frontal lobe damage in behaviour is disinhibited, overfamiliar and tactless. Euphoria can be a feature and the person may demonstrate a level of smugness. Concentration and attention may be reduced. Formal intelligence is generally not affected.

Major head injury has both immediate effects and longer term neurological or psychiatric consequences such as dementia and personality disorder. Personality changes that can occur as a result of head injury include irritability, loss of spontaneity and drive and reduced control of impulses. Emotional changes include a higher risk of anxiety, depression, irritability, headache, dizziness, fatigue, poor concentration and insomnia.

Menopause

Depressive and anxiety related conditions around the time of menopause may be related to hormonal changes but this has not been proved. Theories are that symptoms can result from the woman's role changing as her children leave home, her relationship with her husband alters and her parents become ill or die. Hormone Replacement Treatment does not appear to be a major benefit to depression during menopause. Treatment of depression should be the same as treatment at other times of life.

Medication which triggers depression

Some medications can cause depression symptoms:

- Oral steroids, such as Prednisone, often taken for COPD (bronchitis) and inflammatory conditions like arthritis
- Hormones, such as progesterone and oestrogen (eg) oral contraceptives
- Tranquilizers including benzodiazepines such as diazepam and alprazoplam
- Some blood pressure medications (eg) Beta Blockers
- Heart medications, such as digoxin (Lanoxin®)
- Isotretonin (Roacutane®), a drug used for acne

Illegal drugs

Prolonged use of stimulants such as amphetamines (Speed), Cocaine and Ecstasy can lead to disturbance of perception and thinking. A paranoid psychosis may occur closely resembling the paranoid form of schizophrenia with delusions and sometimes aggressive behaviour. This condition normally subsides a week or two after stopping the drug but can persist in some cases for months. Depression can follow long term use of stimulants.

Cannabis exaggerates existing mood, whether it is euphoria or dysphoria (low mood) in the same way as alcohol does. Some people can develop an acute psychosis (losing touch with reality) while consuming large amounts of cannabis but this normally subsides quickly when the drug is stopped.

Is there a link with vitamin D and depression?

There has been a theory in recent years that low serum vitamin D is linked to depression. New research has shown that treating with high doses of the supplement does not ease depressive symptoms.

Conditions which mimic bi-polar disorder

Many psychiatric conditions may mimic, and at times coexist with bipolar disorder including schizophrenia, posttraumatic stress disorder, abuse of alcohol and cocaine or amphetamine use.

In addition, symptoms associated with several medical conditions resemble manic episodes, including thyrotoxicosis (overdose of thyroxine), partial complex seizures (form of epilepsy), systemic lupus erythematosus (autoimmune disease causing damage to organs), cerebrovascular accident (head injury), human immunodeficiency virus (HIV), syphilis, and steroid-induced mood symptoms. Dementia should be considered a possibility in people with late onset bi-polar disorder (ie) over 50.

Bipolar disorder is often misdiagnosed as major depression. It's important to diagnose it correctly, because if bipolar disorder is treated with antidepressants, it carries the risk of bringing on manic states. There is only a limited role for long term treatment with antidepressants in bipolar depression; preventative medication has a greater role. More detailed information on Bi-polar disorder written by pharmacist Eamonn Brady can be viewed at our website (www.whelehans.ie) or ask our staff for more detailed info.

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