Sleep and mental health

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Sleep occupies approximately a third of the human life span and facilitates very important psychophysiological processes for brain function and mental health. Decades of research demonstrated that medicine of sleep disorders and mental disorders are related in numerous ways.

Neuroimaging and neurochemistry studies suggest that a good night's sleep helps foster both mental and emotional resilience, while chronic sleep disruptions create conditions for negative thinking and pessimistic emotions (Cheng et al., 2018).

It has been observed long time ago, that sleep disturbances are highly prevalent in all types of mental disorders with most of the patients in psychiatry clinics having complaints about sleep disturbances.

On the other hand, mental health problems are also highly prevalent in patients see in the sleep disorders clinics. 67% of patients who presented to a sleep disorders center reported an episode of depression within the previous 5 years, and 26% described themselves as depressed at presentation (Mosko et al., 1989).

Chronic insomnia is the most common sleep disorder which is reported to affect up to 10% of the general populations (AASM, 2014). However, incidents of chronic insomnia in patients with clinical depression are considerably higher and occur in 93% of the patients (Park et al., 2013). Complex insomnia, which include simultaneous difficulties in falling asleep, staying asleep and waking up too early affects 64% with depression (Park et al., 2013).

Depression is also closely associated with Obstructive Sleep Apnoea, a condition in which affected individuals can't breathe normally during sleep because of upper airway obstruction. Moderate to severe obstructive sleep apnoea affect approximately 14% of the patients with clinical depression (Hein et al., 2017).

One third of the patients with clinical depression report symptoms of Restless Legs Syndrome (Gupta et al., 2013). Restless Legs Syndrome is a sleep related movement disorder presenting with unpleasant and uncomfortable sensations in the legs which also can be associated with an irresistible urge to move them. Symptoms commonly occur (or getting worse) in the evening hours, and are often most severe at night when a person is resting, such as sitting or lying in bed.

Up to 7% of depressed individuals can also be affected by Hypersomnia (Roberts et al., 2000). Patients with hypersomnia feel excessively sleepy during the day and have difficulty functioning during the day because sleepiness and fatigue. Sleep disruption is a recognised risk factor for the onset and relapse of many psychiatric symptoms including manic / hypomanic episodes (Hensch et al., 2019), psychotic episodes (Ruhrmann et al., 2010) and transition to major depression (Buysse et al., 2008, Breslau et al., 1996).

Reduced total sleep time and poor sleep quality were shown to be associated with higher levels of next-day suicidal ideation in vulnerable individuals (Littlewood et al., 2018).

Sleep disturbances with insomnia is one of the predisposing factor for development of bipolar affective disorder (Hensch et al., 2019) and is a significant predictor of subsequent major depression (Breslau et al., 1996, Li et al., 2016). It is important to understand that impaired or reduced sleep is not just a symptom of various mental health conditions, but contribute to the disease process itself, such as progression of depressive illness, anxiety and hypomanic behaviour.

Main points

- 1. Sleep disorders are very common in clinical depression and other mental health conditions.
- 2. Most common sleep disorders, associated with mental health issues are: chronic insomnia, circadian sleep disorders, sleep related breathing disorders, restless leg syndrome and periodic limb movement disorder.
- 3. Insomnia is significantly associated with an increased risk of depression.
- 4. Patients with clinical depression should be submitted to a rigorous and careful evaluation of potential sleep problems as part of the clinical history.
- 5. When sleep-related disorders are suspected, subsequent supplementary investigations might be carried out.
- 6. Most of the sleep disorder are treatable.
- Treatment of sleep disorders can improve treatment outcomes for major depressive episodes and for other mental disorders.

How is Insomnia Treated

There are many different types of sleep aids for Insomnia, including over-thecounter (non-prescription) and prescription medications. Main prescription medications for Insomnia in the UK include benzodiazepine hypnotics (Diazepam, Temazepam) and non-benzodiazepine hypnotics (Zolpidem, Zopiclone). Doctors also frequently prescribe sedative antidepressants, antihistamines and sometime small doses of sedative antipsychotic medication to improve sleep. Use of medication in insomnia may have advantages of easy accessibility, simple administration route and quick pace of therapeutic response in some cases. The absence of the required commitments in behavioural modification may also be an appealing benefit for some people. However, sleeping pills can have serious side effects and you can become dependent on them.

Some over-counter medications, herbal supplements and melatonin are advertised for treatment of insomnia. Although melatonin can be very helpful medication in addressing some sleep difficulties, it is only works if taken correctly at individually specified time, at the correct doses and for correct indications. Deciding which medication may be right for you depends on the type and duration of insomnia symptoms and many other different health factors. This is why it's important to consult with a doctor before taking a sleep aid and to make sure that you have on-going medical monitoring reviewing medication effectiveness.

You need to remember that medication does not address the causes of insomnia and for this reason, it is frequently ineffective in a long-term. Medication can be effective for acute insomnia symptoms, but usually does not work in chronic insomnia. Cognitive Behavioural Therapy is an effective non-medication treatment for insomnia leading to sustained improvement in sleep (Irwin et al., 2006, Morin and Benca, 2012). It works by targeting the factors maintaining chronic insomnia and resulting in sustained changes in sleep behaviours and sleep-attitudes. Cognitive Behavioural Therapy is recommended by The American College of Physicians as a first line treatment for chronic Insomnia (Qaseem et al., 2016).

Treatment protocol for chronic insomnia is much individualised, the number of sessions required for therapy varies between 4 and 8. Response to treatment largely depends on patient's engagements and adherence to treatment recommendations.

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