

The Impact of the Mind on Sleep Iva Lloyd, BSc, RPE, ND

Adequate and restful sleep is an essential component of health yet for many it is often elusive. When healthy, sleep is a naturally occurring state of relatively suspended sensory and motor activity and it is a time when the brain is more responsive to internal versus external stimuli. It is an autonomic nervous system activity, where the parasympathetic nervous system (PNS) activity is influenced by the circadian system and the sympathetic nervous system (SNS) activity is influenced by the sleep system. (Burgess H, et al 1997) Non-rapid eye movement (NREM) sleep is associated with PNS activity and this progressively increases across the four stages of NREM sleep. In rapid eye movement (REM) sleep, PNS activity decreases and SNS activity increases. Deep, restful sleep is dependant on an individual being able to naturally transition from their day-time sympathetic mode to the calming mode of the parasympathetic and is easiest when an individual is content within them self.

From a Traditional Chinese Medicine (TCM) perspective sleep depends on the state of Blood and Yin as they are the "residence" of the mind or Shen: "without Blood and Yin, the Shen has no residence and it floats at night causing insomnia." (Maciocia 1998) During sleep an individual's energy (or Qi) moves from the external (Yang) to rest in the internal (Yin). It is also a time when Yin embraces and nourishes Yang. (Rossi 2007) This is also mirrored in the physiological circulation of the defensive wei qi, which during the day circulates twenty five times in the yang and during the night circulates twenty-five times in the Yin. (Sagar 2001)

Following the TCM view, an inability to fall asleep, but sleeping well after falling asleep, indicates deficiency of Heart-Blood. Insomnia in the sense of waking up many times during the night indicates deficiency of Kidney-Yin. Dream-disturbed sleep indicates Liver-Fire or Heart-Fire. Restless sleep with dreams indicates retention of food. Insomnia therefore acknowledges aetiological patterns of both excess (fire, phlegm) and deficiency (emptiness of blood, Yin, Qi). Disturbed sleep is the nocturnal equivalent of restlessness during the day. (Maciocia 1998) From an Ayurvedic perspective, insomnia is the most typical sign of nervous distress, where frequent insomnia is most commonly a Vata or Air-type disorder due to stress, anxiety, excessive thinking, ungroundedness, hypersensitivity, taking of drugs or stimulants, too much travel, overwork and other Vata increasing factors. Pita or Fire-type individuals suffer from insomnia due to turbulent emotions, irritability, anger, jealously, resentment and hatred and overeating of hot or stimulant foods. Kapha or Water and Earth-type individuals tend towards excess sleep, so insomnia is seldom a problem – if it does it is often a congestive disorder. (Frawley 1989)

In all symptoms of medicine an unsettled or overactive mind is often the cause or a contributing factor to insomnia and other sleep related problems. Addressing sleep problems involves identifying the factors causing an over sympathetic nervous system, an overactive mind or assisting patients in understanding why they are discontented with their life.

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An Unsettled Mind and Insomnia - The Troubled Marriage

Insomnia is common in all; yet there are variations by age and gender. One of the most common symptoms associated with insomnia was excessive worrying with 86.5% of patients reporting never having experienced insomnia without having excessive worries. (Bélanger et al 2004) Also, 100% of those diagnosed with PTSD reported having insomnia. (Leskin et al 2002) For adolescents, depressive symptoms showed a greater association with sleep problems, while anxiety symptoms were generally associated with sleep problems in all other age groups. It is common for elderly people to experience both insomnia and anxiety. Traditional Chinese Medicine explains this due to the normal decline of Qi and Blood as one ages.

Anxiety disorders and insomnia are each prevalent, impairing and highly comorbid (Ramsawh et al 2009) with anxiety and depressive disorders accounting for 40% to 50% of all cases of chronic insomnia. (Becker & Sattar 2009) Among those with comorbid disorders, anxiety disorders preceded insomnia 73% of the time, while insomnia occurred first in 69% of the cases. (Jansson & Linton 2006; Johnson et al 2006) Anxiety has a tendency to increase the severity and frequency of insomnia and insomnia has a tendency to increase anxiety. (Larsson et al 2008) People with insomnia had greater depression and anxiety levels than people not having insomnia and were 9.82 and 17.35 times as likely to have clinically significant depression and anxiety, respectively. (Taylor et al 2005) Research suggests that adequate sleep is critical for many aspects of cognition including processing speed, verbal skills, memory and concentration in all age groups especially adolescents and the elderly.

Lifestyle - A Major Causal Factor

There are many factors that are associated with initiating or aggravating the symptoms of both insomnia and an unsettled mind including dietary considerations, sleep hygiene, exercise, external factors and reaction to social and life situations.

Research supports the association and the treatment benefits of lifestyle changes. For example, it is advisable to avoid foods that stimulate the nervous system, such as sugar, caffeine, excess fruit and alcohol (Buist 1985; Wendel & Beebe 1984); to avoid foods that are known allergies and intolerances and to ensure that the diet is adequate in minerals and well balanced. (Lebovidge et al 2009) Late-night eating and eating heavy or rich meals are also best avoided.

Proper sleep hygiene including having a regular sleep time, decreasing stimulating activities prior to bedtime and sleeping in line with the circadian rhythm are helpful as it has been shown that both short-duration (<6 hours per night) and long-duration (> or =9 hours per night) sleepers were more likely to have a depressive disorder than were those sleeping 7 to <8 hours per night; the association between total-sleep-time and anxiety disorders was also U-shaped. (van den Berg et al 2009)

Adequate exercise is consistently associated with proper sleeping and mental contentment and both excessive exercise and a lack of exercise have been associated with insomnia and to some degree anxiety. (Youngstedt 2005; Beullens 1999) For some individuals short-bursts of intense, aerobic-like exercise has

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been shown to be beneficial in decreasing anxiety, especially if the anxiety is associated with "fire" emotions such as irritability, frustration or anger. Stretching exercises and yoga-type exercises are relaxing and help to calm the nervous system. When working with patients addressing the dietary and lifestyle factors often provides a degree of relieve and provides the practitioner and the patient a greater window of opportunity to address the causes of an unsettled mind.

There is a close association between anxiety, worry and improper breathing or hyperventilation which over time can cause anxiety and lead to insomnia. Teaching patients' proper breathing techniques and addressing hyperventilation concerns are integral to most treatments. (Chaitow 2008) Meditation is also very effective as it restores a balance between the sympathetic and parasympathetic nervous system and increases melatonin levels. Cognitive-behavioral therapy has also been proven to be very effective and includes many of the recommendations listed previously. (Becker & Sattar 2009)

Due to the reciprocal nature of an unsettled mind and insomnia and the integrated approach to naturopathic medicine treating one symptom is often beneficial in reducing the severity of other symptoms, especially when the initiating symptom is the primary focus of treatment. Because of the causal link between lifestyle and insomnia and anxiety lifestyle changes should be considered as a first-line of treatment.

Treating an Unsettled Mind

There are many naturopathic treatments commonly used to treat an unsettled mind and yet for many patients taking supplements, modifying lifestyle, exercising or doing bodywork provides temporary relieve or improves the situation partly, not completely. Treating patients with an unsettled mind often requires teaching them how to work with their mind, how to address the roots of their discontentment and how to become more settled within them self.

Anxiety and depression are normal responses to situations in our life that are unpleasant or worrisome. They serve a purpose of notifying us of the misalignment between our expectations and reality. They provide an opportunity for growth, change and introspection. Mental unrest, like all symptoms is a message – it is trying to get our attention. For some mental unrest is a way of life. It becomes a learned behavior and a family trait. For others it follows a traumatic or stressful event or a close-encounter. Some individuals experience it chronically, others periodically. It can be extreme and happen suddenly, or it can build-up overtime. For most it is a mental state that is feared and one that people try desperately to avoid and suppress.

Mental unrest is partly due to the devastation of the environment, the fact that chronic illness is on the rise and the ongoing economic crisis. It is also due to the fact that we live in a society that is so busy that individual's often forget to take the time to enjoy life, to step-back and decided if they need to make changes, to really think about their life and determine if they are happy and on the right path. When people slow down and look at their life they realize that their dreams are on the back burner and they are measuring happiness by what they achieve or own versus by how they feel and how much they enjoy their life. It is the



alignment of one's life with their expectations and dreams that determines the degree of contentment and 'joie de vie' that one has about their life. When contentment and joy is high sleep comes easily; when it is not sleep is often difficult. When a person realizes that they are not content with their life they have the option of resetting their expectations or changing something.

The busyness of life results in an overstimulation of the sympathetic nervous system. An over-stimulated mind is not grounded, in other words, there is too much excessive thought, often about the same things, with little or no resolution or concrete path. Teaching patients the value of journaling and making lists is beneficial. The practice of writing things down is a form of grounding the mind. Making lists works well for patients that find that their mind is focused on what they need to do tomorrow or ideas that they don't want to forget. Journaling about sleep patterns, diet, physical symptoms, and stressful situations assists patients in seeing the triggers that affect their health. It provides them with the knowledge that health and disease are logical and that they happen for a reason. Mental unrest and hence insomnia are often intensified due to the misconception that symptoms occur randomly and that there is nothing that they can do.

For the most part, mental unrest is a story that a person tells them self – often based on a negative or worse case outcome. Teaching patients to become very aware of their mind chatter and of the stories and themes that they tell them self everyday is valuable. Teaching them how to plan for positive outcomes and how to envision a future that they enjoy assists patients in sensing the difference between mental unrest being a symptom that keep them on track and one that keeps them paralyzed. With massive amounts of information being available at our fingertips many people try and plan out their life. Instead of being settled with knowing their direction and what they need to do next they believe that they need to plan many steps ahead. Life doesn't work that way. By learning mindfulness and how to stay more present, patients find that they are able to sleep better. There is research that shows that prayer is beneficial; there is also research that shows that individuals that are worried about do worse than those that are prayed for. Worry is like a negative prayer. Asking patients to change their worries to prayers is an interesting and worthwhile exercise.

When the cause of an unsettled mind is due to an unresolved situation or suppressed emotions the best therapy that a practitioner can provide a patient is the tools to address the situation and emotions. At times that involves just listening and truly allowing the patient to communicate the impact that a situation had on them without judgement. Other times it involves providing patients with mental concepts that allow them to move through the process and other times it requires referral to someone whose training may be more suited to the patient or the situation. I find that many patients are aware that stress and emotions affect health yet they are often surprised to the degree to which they are linked.

The causes of insomnia and mental unrest are complicated and diverse. For many social, lifestyle and dietary reasons as well as demographics and global changes they are becoming more prevalent and wide-spread. As practitioners it is becoming increasingly important to recognize the link between these two health concerns and to be able to address the psychological impact more directly and proficiently.



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