Review of literature of Role of Homoeopathy In Insomnia

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Insomnia is a disturbance of normal sleep patterns commonly characterised by difficulty in initiating or maintaining sleep.(13) Almost everyone can recall more than one night of poor sleepin the night and its resultant effect on the next day or a full nights non restorative sleep. Symptoms like these have become a daily experience because of stress full lifestyle. Insomnia is a very common complaint that one encounters in general practice. Depending on the severity , its prevalence ranges from 9 to 27%. (14)

Insomnia leads to day time fatigue , loss of productivity and inadequate quantity or quality ofsleep which is further associated with negative impact on health and function. It carries a huge burden on economy in terms of cost management , higher chances of depression and functional limitations . Despite of all these problems, insomnia still goes highly untreated or managed by over the counter medications. (14) When treatment with hypnotic medication is indicated , the physician and patient should both be clear that treatment is of short duration and that some symptoms including a brief recurrence of insomnia, may be expected when medication is discontinued. Current management of insomnia may include psychological, behavioural therapies and also screening tools like questionaires have an important place. (14)

Kent was converted to Homoeopathy, reason behind his conversion was his wife was seriously ill. No amount of eclectic and allopathic treatment helped her. She entreated her husband to seek medical advice and help from a known Homoeopath in their neighbourhood. To satisfy her whim he called Dr.Phelan, the homoeopath. He watched , with possibly contemptuousamusement, taking the case -history and later his giving her some globules to be dissolved in water and taken according to his directions until she fell asleep. Mrs. Kent had been suffering from sleeplessness for days and nothing had helped her the least in giving her some sleep. Kent chuckled within himself when Dr. Phelan mentioned about her from getting sleep from the medicated water. He however, fulfilled his part of the contract by giving her the first dose. The second dose to be given to her was delayed because Dr. Kent became absorbed in his books.

When he remembered about the dose, he found her into such a natural and sound sleep.This incident transformed his thinking. Under the care of Dr. Phelan, Mrs. Kent made a steady progress from the next day onwards. (9)

There is much literature regarding use of Homoeopathic remedies in treatment of Insomnia. Unfortunately there is paucity of clinical trials evaluating efficacy of homoeopathic treatment of insomnia and treatment by a Homoeopath in the management of Insomnia. (16)

Definition:

Sleep is defined as unconsciousness from which the person can be aroused by sensory

orother stimuli.

It is the natural state of rest for mind and body with closed eyes characterised by partial or complete loss of consciousness. Loss of consciousness leads to decreased response to external stimuli and decreased body movements. Depth of sleep is not constant throughout the sleeping period. It varies in different stages of sleep. [5]

Sleep Requirement:

Average sleep requirement per day at different age group is:

- Newborn infants : 18 to 20 hours
- Growing children : 12 to 14 hours
- Adults : 7 to 9 hours
- Old persons : 5 to 7 hours

Functions of sleep :

Sleep serves a restorative , homoeostatic function and appears to be crucial for normal thermoregulation and energy conservation

Physiological changes during sleep

During sleep most of the body functions are reduced to basal level

- PLASMA VOLUME :

Plasma volume decreases by about 10% during sleep.

- CARDIOVASCULAR SYSTEM :

Heart rate reduces. It varies between 45 and 60 beats per minute,
Blood pressure falls to about 90-110 mm Hg. Lowest level is reached about 4th hour of sleep and remains at this level till a short time before waking up. Then the pressure commences to rise. If sleep is disturbed by exciting dreams , the pressure is elevated above 130 mm Hg.

- RESPIRATORY SYSTEM :

Rate and force of respiration decreases . Respiration becomes irregular and Cheyne – Stokes type of periodic breathing may develop.

- GASTROINTESTINAL TRACT:

Salivary secretion decreases during sleep . Gastric secretion is not altered or may be increased slightly . Contraction of empty stomach is more vigorous.

- EXCRETORY SYSTEM:

Formation of urine decreases and specific gravity of urine increases.

- SWEAT SECRETION:

Sweat secretion decreases during sleep.

- LACRIMAL SECRETION

:Lacrimal secretion during sleep decreases.

- MUSCLE TONE:

Tone in all the muscles of body except ocular muscles decreases very much during sleep. It is called as sleep paralysis.

- REFLEXES :

Certain reflexes particularly knee jerk are abolished. Babinski sign becomes positive during deep sleep . Threshold for most of reflexes increases . Pupils are constricted . Light reflex is retained . Eyeballs move up and down.

- BRAIN :

Brain is not inactive during sleep. There is characteristic cycle of brain wave activity during sleep with irregular intervals of dreams. Electrical activity in the brain varies with stages of sleep.

Types and stages of sleep:

- NON RAPID EYE MOVEMENT SLEEP OR SLOW WAVE SLEEP

It is a sleep without movement of eyeballs . It is also called as slow wave sleep because of generation of slow waves in brain. It occupies 70 to 80% of total sleeping period and dreams donot occur during this type of sleep. NREM is followed by REM sleep.

<u>Stages of NREM Sleep:</u>

Stage 1 :- Stage of Drowsiness

While feeling asleep and after going to bed , the person is in period of wakefulness , i.e while lying down the eyes are closed and mind is relaxed . Then the person proceeds to drowsy state. During drowsiness the person can be awakened easily . Muscular activity slows down. Some persons may have feeling of falling followed by sudden muscular contractions . This period lasts for about 1 to 10 minutes.

Stage 2 :- Stage of Light Sleep

When the person goes to light sleep from drowsiness , heart rate slows down and body temperature starts decreasing . Body prepares to go to deep sleep. This period lasts upto 20 minutes

Stage 3:- Initial stage of Deep Sleep

It is the transitional period between light sleep and deep sleep.Hence it is considered as initial stage of deep sleep.

Stage 4:- Stage of Deep Sleep

Nowadays stage 3 and 4 are combined together. When the person enters deep sleep , it is difficult to wake up. If someone wakes him or her up, there may be a feeling of disorientation for few minutes.In spite of having potential sleep disturbances such as noises,some person may sleep without any reaction.

There is release of many vital hormones which induce growth and development. Immune system is boosted. Muscles and tissues are repaired.Body builds up energy for a next day.

During this stage, children may have bed wetting, nightmares and sleepwalking. In most of the people stage 3 and 4 lasts combinely last for about 40 to 60 minutes.

- RAPID EYE MOVEMENT SLEEP OR REM SLEEP

REM Sleep is the type of sleep associated with rapid conjugate movements of the eyeballs. Though eyeballs move the sleep is deep. So it is also called as paradoxical sleep. It occupies about 20 to 30% of sleeping period. Functionally REM sleep is very important because it playsan important role in consolidation of memory. Dreams occur during this period. Muscles are relaxed or temporarily paralyzed . There is increase in heart rate and blood pressure. Respiration becomes rapid , shallow and irregular.

REM sleep during first cycle of sleep lasts for about 10 minutes and duration gradually increases in successive cycles and in final cycle it may last for about 1 hour.

MECHANISM OF SLEEP

Sleep occurs due to activity of some sleep inducing centers in brain. Stimulation of these centers induces sleep. Damage of sleep centers results in sleeplessness or persistent wakefulness called insomnia.

SLEEP CENTERS

Complex pathways between reticular formation of brainstem , diencephalon and cerebral cortexare involved in the onset and maintenance of sleep. However centers which induce sleep are located in brainstem.

- Role of Raphe Nucleus :- It is situated in lower pons and medulla . Activation ofthis nucleus results in non REM sleep. It is due to release of serotonin by nerve fibers arising from this nucleus . Serotonin induces non REM sleep
- Role of Locus Coeruleus of Pons :- Activation of this center produces REM sleep. Non adrenaline released by the nerve fibers arising from locus coeruleusinduces REM sleep. [5]

INSOMNIA

Insomnia is the inability to sleep or abnormal wakefulness. [5]

It is also known as DIMS (Disorder of initiation and / maintenance of sleep)

Insomnia means one or the following :

- Difficulty in initiating sleep (going off to sleep)
- Difficulty in maintaining sleep (remaining asleep)This includes both:
- Frequent awakenings during the night, and
- Early morning awakening
- Non restorative sleep ,i.e despite adequate duration of sleep, feeling of not having restedpresent (poor quality sleep).

Insomnia is very common, with nearly 15-30% of general population complaining of aperiod of insomnia per year requiring treatment. It is required for the diagnosis that the sleep

disturbance occurs at least 3 times a week for atleast 1 month, and that it causes either marked distress or interferes with social and occupational functioning. [4]

Insomnia in Geriatric age group:

Insomnia is a frequent complaint among elderly people. Medications , physical illnesses and anxiety are common factors that cause sleep disturbance in elderly. By age 75, 1/3rd to ½ of elderly people complain of insomnia and the typical elderly person lies awake 1/5th of night. At age 90, people sleep an average of 6 hours per night, compared with 8 hours per night in young adults. [2]

Insomnia should be differentiated from short sleeper, who needs less than 6 hours of sleep per night and has no symptoms or dysfunction . A short sleeper does not need treatment.

One cause of insomnia , PMS (periodic movement in sleep) needs elucidation. It actually consist of 2 different syndromes.

Periodic limb movement disorder (PLMD) :- It is characterised by sudden , repeated contraction of one or more of muscle groups (usually of the legs) during sleep. Often occuring bilaterally , it is followed by partial (most commonly) or complete arousal. Since each individual contraction lasts for a few seconds and is repeated at an interval of 20-60 seconds during a long sleep-period , partial or complete awakenings occur many times in one night sleep.

The patient is usually not aware of myoclonus. He usually complains of non restorative sleep orof frequent awakenings. Myoclonus is observed , if at all by bed partner. This is commonly seen in middle aged and elderly people. Due to night time insomnia, daytime hypersomnia can occur at times may be the only presenting symptoms.

Restless leg Syndrome (Ekbom Syndrome) :- It is a condition in which person experiences during waking , an extremely uncomfortable feeling in leg muscles. Sometimes it may resemble painful creeping sensations deep inside calf muscles. Classically, these abnormal sensations occur while sitting or lying down and cause an irresistible urge to move the legs. Moving about

or standing provides immediate, temporary relief. This is often associated with periodic limb movement disorder (during night sleep). Daily regular exercises can lead to marked improvement in certain cases.

SLEEP HYGIENE

- Regular , daily physical exercises
- Avoid fluid intake and heavy meals just before bed time.
- Avoid caffeine intake (eg- tea, coffee,cola,drinks) before sleeping hours.
- Avoid regular use of alcohol (especially avoid use of alcohol as a hypnotic forpromoting sleep)
- Avoid reading or watching television while in bed.
- Sleep in a dark , quiet and comfortable environment. [4]

A sleep diary can be used to help diagnose and measure improvements in sleep pattern andquality.The diary is meant to capture sleep wake information over several weeks. Patients are
instructed to record the information by themselves it can be recorded by caregiver.

Homoeopathic Causes and Repertorial References according to KENT andSYNTHESIS REPERTORY in Insomnia

CAUSES	RUBRICS FROM KENT	RUBRICS FROM SYNTHESIS
Any thoughts or stressful conditions may cause temporary insomnia	SLEEP-sleeplessness; thoughts activity of mind from	SLEEP-sleeplessness; activityof thoughts;from SLEEP-sleeplessness;thoughts,business,from SLEEP-sleeplessness; tension,from
Anxiety Disorder (difficulty in initiating sleep is common)	MIND-Anxiety-sleep, before MIND-Anxiety-sleep ,on going to MIND-Anxiety-sleep, loss of MIND-	MIND-Anxiety- sleep, preventing SLEEP- disturbed-anxiety from SLEEP- sleeplessness-anxiety, from
Any painful or uncomfortable condition		SLEEP-sleeplessness-accident, after an SLEEP- sleeplessness-fracture , after reposition of

		SLEEP-sleeplessness-operation; after
Heart diseases	PAIN- stitching heart; sleep during CHEST-Palpitation, heart; sleep, on going to(876) CHEST-Palpitation, heart; sleep, during CHEST- Pulsation; night, interrupting sleep	SLEEP-sleeplessness- aortic disease, in SLEEP-sleeplessness-heart; with disease of SLEEP-sleeplessness-palpitations , from SLEEP- sleeplessness- sounds in the heart from
Respiratory diseases	NOSE-coryza; sleeplessness, with COUGH-sleep, before COUGH-sleep,disturbing COUGH- sleep, preventing RESPIRATION-accelerated; sleep, during RESPIRATION-accelerated; sleep, going to RESPIRATION- arrested; sleep,on going to RESPIRATION- arrested; sleep,	SLEEP-sleeplessness-coryza from SLEEP-sleeplessness-cough from SLEEP-sleeplessness-pneumonia

	during RESPIRATION- arrested; when going to sleep on the right side RESPIRATION-asthmatic; sleep, coming on during RESPIRATION-deep; sleep,during RESPIRATION- difficult; sleepduring RESPIRATION-impeded; sleep,during RESPIRATION-irregular; sleep,during RESPIRATION- loud; sleep, in RESPIRATION-rattling; sleep,during RESPIRATION-sighing; sleep,during RESPIRATION- slow; sleep, during RESPIRATION-sobbing; in sleep RESPIRATION-stertorous; sleepduring RESPIRATION- wheezing; sleep,during RESPIRATION- whistling; sleep in	
Rheumatic and musculo-skeletal diseases	___	SLEEP-sleeplessness; rheumatic pains from
Old age	SLEEP-sleeplessness; old people,in	SLEEP-sleeplessness; old people,in
Delirium	MIND-delirium; sleep during MIND-delirium; sleep; falling on	MIND-delirium-alternating with, sleeplessness MIND-delirium tremens; sleeplessness with SLEEP-Sleeplessness-delirium SLEEP-sleeplessness-delirium tremens, in

Alcohol, drugs use, tea,coffee and tobacco	SLEEP-sleeplessness; coffeeabuse of after SLEEP- sleeplessness; tobacco,abuse ,after SLEEP-sleeplessness; wine,	SLEEP-sleeplessness; alcohol,aggravation SLEEP-sleeplessness; beer,amelioration SLEEP-sleeplessness; drugs ,
	after abuse of	after SLEEP-sleeplessness; drunkards, in SLEEP-sleeplessness; drunkenness during SLEEP-sleeplessness; tea, afterabuse of SLEEP-sleeplessness; tobacco; after abuse of
Periodic limb movementdisorder	SLEEP-sleeplessness; drawing inlegs SLEEP-sleeplessness; heavy feeling in arms from SLEEP-sleeplessness; twitchingof limbs	SLEEP-sleeplessness; jerks;from, head in SLEEP-sleeplessness; jerks;from, limbs in SLEEP-sleeplessness; twitching;from, lids, of SLEEP- sleeplessness; twitching; from, limbs,of
Any pathological conditions		SLEEP-sleeplessness;diabetes,in SLEEP-sleeplessness; haemorrhages from SLEEP-sleeplessness; haemorrhoids, from SLEEP-sleeplessness;renal affections,from

Homoeopathic treatment for Insomnia

As the Homoepathic prescription is purely based on Individualisation and holistic approach , here are some of the remedies for Insomnia which covers some common symptoms of Insomnia[8,10,17)]

1. Aconite-

- The rapidity of action of aconite determine its symptomatology.
- Mind is affected by such emotional factors, as fright, shock, vexation. Nerves are excited and patient remains under emotional and nervous tension.
- Sleeplessness after midnight, with anxiety , restlessness and tossing about from arterialexcitement ;
- Sleeplessness from a nervous fear that he was not going to sleep, or from a local

irritation, especially in the intestinal tract ; sleeplessness of infants and of aged.

2. Belladona –

- Belladona acts upon nerve centres producing twitching , convulsion and pain.
- Its action upon brain causes furious excitement and perversion of special senses.
- Sleeplessness , especially of plethoric children, from nervous excitement, from local congestion, from irritation in various parts; flushed face, headache ; insomnia after weaning with constant crying for days and weeks; drowsy evenings , but no sleep follows , and feels in the morning as if he had not slept enough .Sleepy but cant sleep (Cham, caust, stram)

3. Coffea cruda

- Coffee increases the sensibility of Nerves, Making them Overexcitable and Oversensitive
  : special senses become Overacute .
- Sleeplessness from overexcitement of mind and body, from joy or agreeable surprise, from long watching, from excessive use of coffee;persistent insomnia of children , without cause.

4. Hyoscyamus niger –

- It disturbs the Mind , brain and nervous system.
- Nervous wakefulness
- Intense sleeplessness of irritable , excitable persons from business embarassments, oftenimaginary.
- Insomnia of children when they twitch in sleep, cry out and tremble and awaken frightened.

5. Nux vomica

- Nux Vomica is an everyday remedy. It corresponds to many diseased conditions to which modern man is prone.
- Sleeplessness caused by excessive study late at night and no exercise in daytime, hence dyspeptic insomnia, awakes tired and unrefreshed after a short morning sleep with headache , bitter taste, coated tongue etc.
- Insomnia from recent drunk or a surfeit of a late and rich supper, causing flatulence and constipation, functional palpitations; gastric and abdominal ailments;loud breathing during sleep.

6. Opium -

- Opium contains about 18 alkaloids, of which apomorphine , morphine and codeine are well known.
- It affects Nerves, Mind and Senses , producing insensibility of nerves, painlessness , depression; drowsy , stupor; torpidity and general sluggishness of function and lack of vital reaction.

- Insomnia from sudden shock caused by bad news, with dullness and dazed depression; inold persons or children.
- Stupid sleeplessness, with frightful visions before midnight; sleepy but cannot go to sleep; insomnia with acuteness of hearing; slight or distant noises keep her awake.
- Sleeplessness from acuteness of hearing.
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7. Avena Sativa:-

- It has been used empirically in substantial doses (5-15 drops of the tincture, preferablyin hot water) in a large number of cases of nerve weakness.
- It has a selective action on brain and nervous system, favourably influencing theirnutritive function.
- Inability to keep mind on any one subject especially when due to masturbation.
- Sleeplessness, especially of alcoholics.
- It is most valuable in enabling a patient to overcome the morphine habit.
- It appears to exert the same kind of soothing action, without creating a habit of itsown..
- Best tonic for debility after exhaustion.

8. Kali Bromatum:-

- It affects the mind and nerves, producing failure of mental power; general numbness ,and anaesthesia of mucous membranes esp. of eyes, throat and skin.
- Insomnia from anaemia, especially during or after acute and painful diseases.
- Night terrors, patient wakes up frightened from terrific visions in his dreams.
- Sleeplessness due to worry and grief and sexual excess.
- Patient is nervous, and feels better when engaged at some work or walking about.
- Awakes from a profound sleep and does not know where he is.

9. Passiflora Incarnata:-

- It has effect on nervous system, an efficient antispasmodic remedy.
- Delirium tremens,
- Sleeplessness from nervous exhaustion, as from severe acute diseases, from mental overwork with headache.
- Restlessness and wakeful, resulting from exhaustion ‘
- Insomnia of infants , aged and mentally worried and overworked with tendency to convulsion
- Breaks off morphine habit.

OTHER INDICATED MEDICINES IN INSOMNIA ARE:-

Baryta Carbonicu

AmbraGrisea
Bryonia
Camphora
Cannabis Indica
Passiflora
Pisidia Erythenia
Staphysagria

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