

The following article is a summary of Dr. DeMayo's (a psychiatrist) presentation at the *Ninth International Conference on Post-Polio Health and Ventilator Assisted Living 2005*. It is edited by Baldwin Keenan of Irvine, CA with the approval of Dr. DeMayo. Permission to reprint must be obtained from **Post-Polio Health International**.

Sleep Hygiene

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Introduction:

Sleep Apnea, Hypoventilation, Periodic Leg Movement are specific forms of sleep disturbance. This presentation deals with sleep in general which is often overlooked in the medical care of polio survivors as well as of the population as a whole. A person should get between 7 ½ to 8 hours of sleep. Sleep is not "dead time" but rather an activity which is critical to our physical and emotional well being.. Conversely, lack of adequate sleep can worsen pain, fatigue, depression, overeating etc....

The assessment of a person's **sleep hygiene** should be done prior to sleep studies and testing for Hypoventilation. Some of a patient's symptoms may not be the result of a medical condition but rather the product of poor sleep habits.

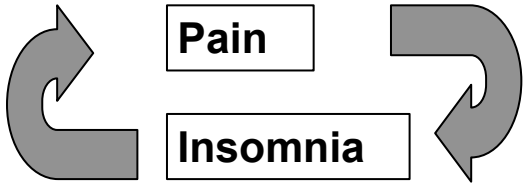
- **Symptoms of Sleep Deprivation**
 - Irritability, Poor Stress Management, Mood Swings
 - Impaired Concentration
 - Impairment of physical function due to fatigue
 - Depression, anxiety
 - Muscular and neuropathic pain
 - Also hypertension and immune issue

It should be clear that to treat any of these symptoms independent of dealing with sleep deprivations will not be very effective.

- **Insomnia**
 - Not feeling rested after habitual period of sleep.
 - Difficulty falling asleep, staying asleep.
 - Non restorative sleep with associative impairment or significant distress for at least one month.
 - 1/3 of the population complains of insomnia
 - The big issue is quality of sleep as much as quantity of sleep

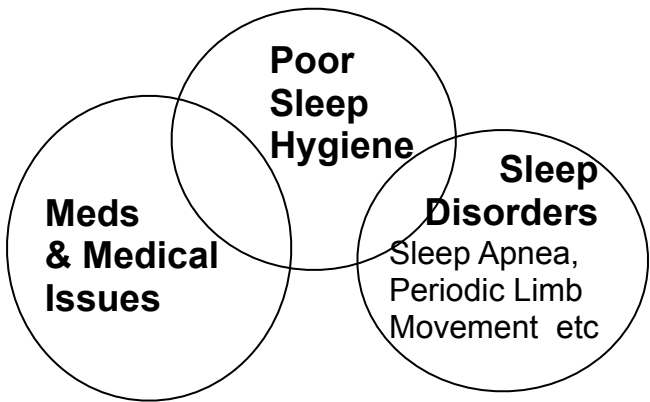
Polio survivors and other pain sufferers are inclined to complain that chronic pain keeps them awake at night. **The pain is real but it is nearly impossible**

to treat until the insomnia is treated.



- **Chronic Insomnia**
 - Insomnia lasting 6 months or longer
 - 10% of the population complains of chronic insomnia
 - More difficult to manage with behavioral training alone
 - You can teach an old dog new tricks

Chronic Insomnia



People of any age can and do break old habits. Faced with a failing liver a drinker is strongly motivated to stop drinking. Faced with increasing pain, fatigue, depression and overeating a polio survivor should be strongly motivated to break the habit of insomnia.

Poor Sleep
Common Reasons

- Pain
- Stress and Anxiety
- Medications
- Environment – noisy, TV,
- Pets
- **Alcohol** – Might be temporarily sedating but causes night time arousals
- Nicotine
- **Caffeine** -- Stimulating effect can last 14 hours.
- Lack of daytime exercise. Sedentary lifestyle. *Late in the day exercise should be avoided.*
- Urologic issues.
- **Daytime napping.** People who get 8- 9 hours restorative sleep may benefit from short naps. People with insufficient or interrupted sleep should not nap.

Sleep Log

During the process of training yourself for sleep it is very useful to create a **SLEEP LOG:**

- Bedtime
- Sleep time
- Awakenings –*including any clear cause*
- Any nighttime symptoms – pain, anxiety, etc
- Out of bed time
- Napping

Sleep Training

Sleep is a trained behavior

Essentials of Training

- Like training your dog it requires **Consistency** and a Pre-training Routine
- Avoid
 - Positive reinforcement of undesired behavior *such as TV, Reading, eating.*
 - Diluting the Stimulus-Response association by *laying in bed awake*
- Need for retraining when behavior deteriorates

For someone with insomnia, his or her bed must be solely associated with sleep. A person needs to establish a set routine to prepare for sleep. Set a specific bed time and wake time and stick to it. Eliminate stimulus: **Don't exercise late** in the day. **Don't watch TV** just before sleep time. You can practice muscle relaxation or use guided imagery. Noises and distractions need to be eliminated or muted by sound machine or possibly relaxation music. Sleeping with **pets** should be eliminated because just their presence in your bed demands your attention. It is also essential to review your **medications** with your pharmacist and physician with the goal of making necessary modifications if the medications are contributing to your sleep problems.

- **Get out of bed if you are unable to sleep for 20 – 30 minutes.**

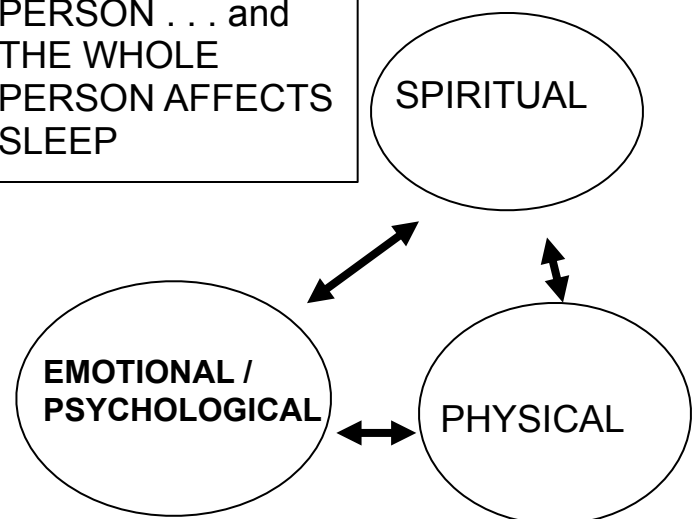
- Leave bedroom
- No lights on
- Do nothing
- Sit quietly
- Relaxation tape OK
- No reading
- No TV
- Do not eat or drink
- Return to bed when sleepy

You might sit for several hours the first night. But each succeeding night you will sit less and sleep more. Your bed needs to be associated with the soothing comfort of sleep and not with tossing and turning.

Sleep is an Active State

During the course of a night a sleeper passes through the 5 stages of sleep during an approximately 90 minute cycle. All 5 stages are important. For this reason you cannot say that 2hrs + 2hrs + 4hrs sleep is just as restorative as 8 continuous hours of sleep. It is important that your goal in training yourself to sleep be to achieve a full night's sleep.

SLEEP AFFECTS THE WHOLE PERSON . . . and THE WHOLE PERSON AFFECTS SLEEP



For an example, frustration in your life will affect your sleep. You might have too high expectations for yourself or for other people. That is the essence of frustration. When you lower expectation, frustration subsides and sleep will improve. If you have a relationship to God --- it doesn't have to be a religion at all --- you can use that relationship as part of your preparation for sleep. Sleep restores you physically, strengthens you emotionally and deepens you spiritually. Medical problems do not disappear, nor does pain simply vanish. But you will no longer add on the medical complications that come with sleep deprivation and you will break the escalating cycle of pain and insomnia.

It is only when you have made the commitment and effort to correct your sleep habits that sleep apnea, periodic limb movement, hyperventilation and other disorders can be accurately diagnosed by a sleep study or other testing procedure.