Su Sueño/Su Vida: training manual for promotores.

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Su Sueño/Su Vida
Training Manual for Promotores

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Su Sueño/Su Vida: Los Trastornos del Sueño y la Promoción del Sueño Saludable is a designated American Academy of Nursing Raise the Voice Edge Runner Program Profile available at:
http://www.aannet.org/initiatives/edge-runners/profiles/del-sueno
Dedication

This manual is dedicated to all of the promotores, who work so hard to help promote health and well-being along both sides of our U.S.-Mexico border. They are instrumental in helping to reduce health inequality. This work to promote sleep and health is also dedicated to the people for whom it is intended, for all of persons, young and old, and their families so that they can continue to enrich the heritage of our countries.
Overview

‘El sueño es la mejor cura para las problemas de vigilia’
(Sleep is the best cure for waking troubles)
Miguel de Cervantes

• Sleep problems and comorbidities
• Meet the Ramirez Family
• Some important sleep disorders, their testing and treatment
  • Obstructive Sleep Apnea
  • Insomnia
  • Restless Legs Syndrome
  • Short Sleep/Circadian Rhythm Disorder
  • Snoring, Restless Sleep, Bed-wetting
• Other types of sleep disorders
• 12 tips for healthy sleep
• References
• SHHS Sleep Habits Questionnaire and Epworth Sleepiness Scale
• Other Sleep Teaching/Learning Resources (Puzzles, Novellas)
Need for Healthy Sleep

- Missing one night of sleep, or having a poor night’s sleep can affect mood, energy, efficiency, and the ability to manage stress.
- Sleep disorders can lead to poorer health outcomes, work/home/traffic-related accidents, poor job performance, stress in relationships.
- For health workers, insufficient, non-restorative sleep and fatigue can compromise patient safety.
- Healthy sleep is as important as diet and physical activity, and is essential for physical health and emotional well-being.
Sleep Problems & Comorbidities

- Short and long sleep duration, snoring, sleep apnea, insomnia symptoms, unrefreshing and insufficient sleep, interrupted sleep, poor sleep quality and leg jerks are associated with
  - Obesity
  - Cardiovascular disease/hypertension
  - Diabetes/impaired glucose tolerance
  - Depression/anxiety
  - Poorer cognitive function
  - Reduced health-related quality of life
  - Disability and mortality
Meet the Ramirez Family:
Sleep Problems across the Lifespan

- Mariano (father)
- Virginia (mother)
- Doña Ana (grandmother)
- Carmencita (daughter)
- Nestor (son)
Mr. Ramirez: Obstructive Sleep Apnea

- **Mariano Ramirez**
  - 51 years old, weighs 300 pounds, has high blood pressure, and complaints of severe fatigue during the day.
  - He works as a day laborer.
  - His wife says he snores so loudly that she sometimes can’t sleep and she gets worried when she sees him stop breathing at night.
OSA Symptoms

- Obstructive sleep apnea (OSA) is a serious sleep disorder that can be life-threatening.
- Symptoms include:
  - Loud snoring;
  - Apneic episodes of ≥10 seconds during the night;
  - Wheezing, gasping, or choking during sleep;
  - Awakening with headache, dry throat, nasal congestion, pain in the chest;
  - Excessive daytime sleepiness (EDS), mood/personality changes, reduced productivity, impotence/reduced libido.

(Baldwin & Quan, 2002)

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Physiology of OSA

- Bed-partner reports
  - Loud snoring
  - Apnea/gasping
  - Brief awakenings

- Physiology
  - Upper airway narrows/closes
    - Intermittent hypoxia
    - Sympathetic activation
    - Sleep fragmentation

- DX: Polysomnography
  (Baldwin & Quan, 2002)
OSA: Epidemiology & Risk Factors

- 3-7% in the general population
  - 2:1 male: female ratio
  - Rates increase in women after menopause
- 20% in 65 and older
- Overweight/Obesity
- Family history
- Cigarette/alcohol use
- Head/neck anomalies
  - Large neck
  - Short lower jaw

(Punjabi, 2008)
**OSA: QOL/Morbidity & Mortality**

- **Poorer Quality of Life**
  - Physical Health
  - Mental Health
  - Social (bed partner may sleep in another room)

- **Morbidity & Mortality**
  - Heart Disease & high blood pressure
  - Type 2 diabetes
  - Memory problems
  - Mood/personality changes
  - Impotence/reduced libido
OSA: Public Health, Cost, Safety

- Public health problem
  - OSA severity related to magnitude of medical costs
  - Untreated OSA ~$3.4 billion in added medical costs
    - VA pts with OSA 6X more likely to have coronary angiography (Baldwin et al., 2005)
  - Male snorers at 2-fold risk for occupational accidents; accidents increase by 50% in men with OSA
  - OSA prevalence expected to increase in young adults due to obesity epidemic (Touchette et al., 2008)

- Public safety risk
  - OSA patients 3X more likely to be in auto accidents
    - Drowsy driving akin to driving drunk/on drugs
Treatment for Mild to Moderate OSA

- Mild/moderate treatment:
  - Losing weight (even 10 pounds);
  - Maintaining ideal weight;
    - Diet,
    - Antioxidant-rich foods,
    - Aerobic exercise.
  - Elevate head of the bed.
  - Side or front sleeping position.
  - Some dental devices.

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Treating Severe OSA

- Severe OSA is treated with continuous positive airway pressure (CPAP), a device with a mask that pushes air to keep the airway open during sleep.
- Surgery (not recommended as it is not effective).
- Some persons eventually may require surgery (trach tube).

(Baldwin & Quan, 2002)
Some Comments on Snoring

- Some people believe that snoring loudly means the person is sleeping well, **but this is false!**

- Although 75% of people who snore have OSA, snoring itself has serious health consequences and *is a risk factor for the metabolic syndrome.* (Troxel et al., 2010)

- A person who snores also prevents their partner from sleeping well, which can lead to separate bedrooms.
Some Interventions to Reduce Snoring

- Avoid alcohol – it relaxes the throat muscles during sleep making snoring more likely to occur.
- If the nose is obstructed or stretched, snoring is more likely to occur; a steamy shower at bedtime could help open nasal passages.
- Change the pillows:
  - Dust allergens in the bedroom or mites in pillows can contribute to snoring;
  - Skin cells from pets in the bedroom may be irritants;
  - Vacuuming pillows every few weeks and replacing them every year can help minimize the presence of mites and other allergens.
- Drink water! Drinking the recommended 8 glasses of water a day helps reduce thickness of nasal secretions, which can improve air flow.
Mrs. Ramirez: Insomnia

- Virginia Ramirez
  - 45 years old, 5 feet 3 inches tall and weighs 130 pounds.
  - She takes care of the home and children and works part time in laundry services for a hotel chain.
  - She says she has a lot of things to worry about and has trouble falling asleep and staying asleep (especially when her husband snores).
  - She relaxes by watching TV in bed.
Insomnia

- Common signs and symptoms of insomnia include:
  - Difficulty falling asleep;
  - Difficulty staying asleep;
  - Waking up very early and having trouble falling back to sleep.
Insomnia Duration

- Length and frequency of insomnia varies:
  - **Acute insomnia** can last anywhere from one night to a few weeks, but generally no longer than one month;
  - It is **chronic** when insomnia occurs for more than three nights in a week for at least one month;
  - Often, people suffer from insomnia for more than 11 years before being diagnosed.
Causes of Acute Insomnia

- Significant life stress (loss or change of employment, death of a loved one, divorce, graduation, etc.);
- Illness;
- Physical or emotional pain;
- Environmental factors that interfere with sleep
  - noise, lights, extreme temperatures (hot or cold);
- Certain medications used for
  - Allergies, depression, high blood pressure, asthma;
- Interference with normal sleep schedule (shift work, jet lag).
- Acute insomnia may not require treatment
  - May be prevented or treated by practicing good bedtime/sleep habits/stimulus control.
Causes of Chronic Insomnia

- Depression and anxiety
- Chronic stress
- Chronic pain or discomfort during the night

Treatment for chronic insomnia includes

- Addressing the health conditions or problems that are causing the insomnia;
- If this continues, behavioral treatments can limit the worsening of insomnia and can teach new ways to promote healthy sleep (e.g., relaxation techniques).
Insomnia Classification

- **Primary insomnia**
  - Symptoms for at least 1 month
  - Cause distress, or reduce ability to function successfully
  - Symptoms cannot be associated with a medical condition, medication side effects, or substance abuse

- **Secondary insomnia comorbid with**
  - Medical condition (diabetes, CVD, cancer)
  - Medications, alcohol
  - Psychiatric disorder (depression, mania, anxiety, PTSD)
Insomnia: Epidemiology

- Primary = 9 – 12% (community studies).
- Secondary = 70% of insomnia problems in the general population.
- More common in women.
- Insomnia contributes to:
  - Substance abuse;
  - Poorer health-related quality of life;
  - Functional impairment & healthcare utilization.
- Economic impact:
  - Direct costs — ~$17 billion/year in the U.S.
  - Indirect costs — accidents, reduced productivity.

(Epstein & Bootzin, 2002)
Diagnosing Insomnia

• Usually self-reported; Providers don’t generally ask.
• Sleep Diary:
  • Bed, wake times, night awakenings, habits, stress;
  • Can uncover factors related to insomnia.
• Actigraphy:
  • Monitors movement as a substitute for wake & sleep;
  • Compare with diary;
  • Shows graphed activity/quiet times over days.

http://pmbcii.psy.cmu.edu/core_d/actigraphy_reports.html
Insomnia: Treatment

- Nonpharmacological behavioral management – add link see handouts
  - Stimulus control;
  - Relaxation techniques;
  - Sleep restriction (mild deprivation).

- Medications:
  - First, see your health care provider;
  - e.g., Lunesta, Rozarem.

(EPstein & Bootzin, 2002)
Doña Ana: Restless Legs Syndrome

- **Doña Ana Ramirez:**
  - Mariano’s 71-year-old mother.
  - She lives with the family.
  - Helps to take care of the home and children when Virginia and Mariano are working.
  - She walks for 30 minutes every day to stay healthy and to take care of her diabetes and high blood pressure.
  - She complains of ‘strange’ irritating feelings in her legs in the evening that she can only make go away by getting up and walking around.
  - These feelings in her legs have been interfering with her falling asleep even though she drinks chamomile (manzanilla) tea to help her sleep.
Restless Legs Syndrome (RLS)

- Uncomfortable sensations in the lower leg.

Major features of RLS:
- (1) an urge to move the limbs;
- (2) symptoms start or become worse with rest;
- (3) there is at least partial relief of symptoms with physical activity;
- (4) worsening of symptoms in the evening or at night.

RLS is associated with Periodic Limb Movements in Sleep (PLMS):
- Periodic repetitive movements of the lower limbs that can disrupt sleep;
- Occurs in 80 – 90% of persons with RLS.

RLS Epidemiology:
- Ranges from 5 – 15%);
- Increases with age;
- Family history of RLS exists in more than 60% of cases;
- Associated with depression (dopamine system);
- More common in women (especially during pregnancy).
**RLS: Causes & Treatment**

- **Causes:**
  - Exact cause of RLS is not known;
    - Possible bases are CNS/PNS, vascular, genetic, metabolic,
  - Metabolic basis may be related to iron deficiency anemia;
  - Genetic basis supported by positive family history.

- **Associated with:**
  - OSA, diabetes, renal disease, peripheral neuropathy, Parkinson’s disease (dopamine system); fibromyalgia, autoimmune disorders.

- **Treatment:**
  - Prescribed by a sleep specialist.
    
  *(Hening et al., 2007)*
Hyperactivity and RLS

- Study showed that more than 44% of people with Attention Deficit Hyperactivity Disorder (ADHD) had RLS, and more than 26% of the people with RLS reported ADHD, or its symptoms.
- Other studies have implicated the dopamine system in both RLS and ADD/ADHD.
- It has been suggested that the issues with RLS-associated poor sleep are related to the distraction associated with ADHD.
- Important to note that neither of the disorders has been proven to cause the other (only correlation - non-causal).
Carmencita: Short Sleep

- **Carmencita Ramirez:**
  - 15-years-old and a high school student.
  - She gets good grades and is active and popular in school.
  - After completing her homework and spending time with her family, she is either on the computer using social media or texting with friends until midnight even on school nights.
  - She needs to get up at 6 am to get ready for school and only sleeps around 6 hours per night.
  - She snacks on chips, candy and Coca Cola while up. In the morning she has a difficult time waking up and needs to set an alarm.
  - She is tired in school and will fall asleep often during her first class.
Circadian Rhythms

- We each have a biological clock that regulates our 24 hour sleep-wake cycle, also known as the **circadian rhythm**.
- Light is the first thing that influences the circadian rhythm; when the sun comes up in the morning, the brain tells the body that it is time to wake up.
- At night, when there is less light, melatonin, a hormone that makes us feel sleepy, is released.
Circadian Rhythm Interruptions

- When circadian rhythms are interrupted or ignored, we may feel groggy, disoriented, and sleepy at inconvenient times.

- Disrupted circadian cycles have been linked with:
  - Long-distance travel, time changes, shift work, insomnia;
  - **Sleep phase delay disorder**, what Carmencita probably has, which is the most common disorder in adolescents.

- Circadian rhythms have also been associated with depression, bipolar disorder, and seasonal affective disorder syndrome (SADS).
Shift Work

- Rotating shifts, night shift, long shifts interrupt the biological rhythms with serious consequences:
- The World Health Organization indicates that people who work at night have an increased risk of breast cancer and testicular cancer.
- Melatonin that is produced shortly after sleep onset provides a protective effect for these cancers,
  - It is not known if over-the-counter melatonin can ameliorate these risks; however, it is unlikely given the interplay between melatonin and other chemicals released during hours of sleep.
Sleep Phase Delay

- Sleep phase delay disorder makes it very difficult to fulfill normal hours in order to get to classes in the morning, taking children to school on time, or maintaining a 9 to 5 job.
- It results in insufficient, or short sleep (≤ 6 hours a night).
Sleep has been Diminishing in Adolescents

• Why?
  • Extracurricular activities.
  • Early school start hours.
  • Electronic devices:
    • Television;
    • Smartphones;
    • Video games;
    • Text messages;
    • Social networking.
Treatments

- Sleep specialists use a variety of interventions for sleep phase delay disorder (e.g., stimulus control/sleep hygiene, sleep deprivation for phase shift).
- **Adolescents require around 9 hours** of continuous, uninterrupted sleep 7 nights a week.
- For adolescents like Carmencita, it is important to establish a specific routine for bed time.
- Extracurricular activities should be monitored so that they don’t interfere with a healthy sleep.
- All electronic devices should be kept outside of the bedroom so the brain can relate the bedroom with sleep.
Nestor: Snoring, Restless Sleep

- **Nestor Ramirez**
  - 8 years old and in the 3rd grade.
  - He likes school but feels the teachers are always ‘picking’ on him, telling him to sit still and pay attention.
  - Even though he works very hard at his assignments and especially likes math and science, his grades are poor. He is becoming very angry with school and himself.
  - His mother has heard him snore loudly at night and when she watches him sleep, he always tosses and turns. He sometimes wets the bed.
Snoring/Restless Sleep in Children

- Snoring and restlessness during sleep are associated with
  - Behavioral problems:
    - Not paying attention;
    - Hyperactivity;
    - Possible misdiagnosis (e.g., ADHD).
  - Poor performance in School.
  - Fatigue and daytime sleepiness.
  - Health problems:
    - Obesity;
    - Diabetes.
OSA: A Common Sleep Disorder in Children as well as Adults

- OSA is becoming more common in children due to malnutrition (obesity) and lack of exercise.
- How common?
  - Snoring only (7-10% habitual to 20% occasional) vs. OSA (1-3%);
  - Peak age 2 - 7 years (coincides with peak tonsil enlargement);
  - 2nd peak in adolescence, with obesity being the major risk factor;
  - Prepuberty: female = male.
- Symptoms:
  - Night: loud snoring, breathing pauses, gasping, snorting, labored breathing, restless sleep;
  - Day: difficulty awakening, hyperactivity, learning problems, daytime sleepiness, aggressiveness or shyness/withdrawal.
The consequences of OSA in children include:

- Obesity
- Diabetes
- Cardiopathy
- High blood pressure
- Gastroesophageal reflux (GERDS)
Insufficient Sleep: Pop Quiz

- On average, how many hours of sleep do you get per night (estimate if shift worker)?
- When you restrict your sleep to 5 or 6 hours per night (children, work, caring for family):
  - What do you eat?
  - Do you eat more or less when you restrict sleep?
  - What do you drink?
  - Do you take time to exercise?
  - How do you feel the next day?
Insufficient Sleep: Lifestyle Risk

- When we restrict our sleep to 5 or 6 hours a night or we have insufficient sleep, we generally eat snacks high in salt, fat and carbohydrates (e.g., potato chips, cookies) and drink beverages high in sugar and caffeine (e.g., cola, soda).

- When we combine insufficient sleep with a diet of “junk food” and insufficient exercise, there is a high chance of becoming overweight/obese which contributes to diabetes, hypertension, and other lifestyle-related chronic illnesses.
Insufficient Sleep, Hormones, Obesity

- Community-living people 30-60 years of age (see figure to right).
- 4-year-long study.
- Compared people who get 8 hours of sleep to persons who get 5 hours of sleep.
- People who slept 5 hours:
  - Higher ghrelin levels (ate more);
  - Lower leptin levels (still felt hungry);
  - Higher BMI (higher rates of obesity).

(Taheri S., et al., 2004)
Short/Insufficient Sleep: Risks

- High blood pressure (Gottlieb et al., 2006)
- Type 2 diabetes & impaired glucose tolerance (Gottlieb et al., 2005)
- More work/traffic-related accidents
- Poor academic performance
- Health care worker performance (Scott et al., 2006)
  - Fatigue = less vigilance = reduced patient safety
  - More burnout
Short/Insufficient Sleep

- High costs (NCSDR)
  - $150 billion/year in U.S.
    - Higher stress;
    - Reduced productivity.
- Public tragedies:
  - Chernobyl;
  - Exxon Valdez.
- High-risk:
  - Type 2 diabetes and impaired glucose tolerance (Gottlieb et al., 2005)
  - High blood pressure (Gottlieb et al., 2006)
  - More home, work and traffic-related accidents
  - Poor academic performance
  - Reduced health care worker performance (Scott et al., 2006)
    - Fatigue = reduced vigilance = reduced patient safety
    - Greater health care worker burnout

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Sleep of Infants and Children

- Required amounts of sleep decrease as children age:
  - ~16 hours for infants
  - ~11 hours age 5
  - ~9 hours age 14

- Over the past several decades sleep duration in children has been decreasing:
  - 10-year-old children sleep 15 minutes less than they did 25 years ago.

- Why?
  - Electronic devices: TV, smart cell phones, video games, texting;
  - Earlier school start hours;
  - After school activities.
Insufficient Sleep among Children

National Sleep Foundation, 2004

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Impact of Sleep Deficiency in Children

- Behavior Problems
  - Inattention
  - Hyperactivity
  - Possible misdiagnosis as attention deficit disorder

- School Performance: Poor grades

- Daytime Fatigue or Sleepiness

- Health Problems
  - Obesity
  - Diabetes
Other Sleep Disorders

- Excessive Daytime Sleepiness
- Circadian Rhythm Disorders:
  - Shift work
  - ‘Jet lag’
  - Delayed Sleep Phase Syndrome (stay up late/wake up late)
- Childhood Sleep Disorders:
  - Night Terrors
  - Sleep walking/talking
  - Bed wetting
  - Restless Legs Syndrome
Excessive Daytime Sleepiness (EDS)

- Associated with:
  - OSA;
  - Insomnia;
  - Short sleep duration;
  - Restless Legs Syndrome.

- Other conditions:
  - Diabetes;
  - Heart disease;
  - Depression.

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EDS and Fatigue

- Behavioral features of sleep disorders, esp. OSA
  - Can occur while talking, driving, or eating.
- Assessment:
  - Subjective: paper & pencil tests, e.g.,
    - Epworth Sleepiness Scale (propensity to doze - gender bias).
  - Objective: obtained in sleep lab, e.g.,
    - Multiple sleep latency test (MSLT)-time to sleep;
    - Maintenance of wakefulness test (MWT)-stay awake.
- Gender Differences:
  - Men more likely to report EDS;
  - Women more likely to report fatigue (could miss OSA).

(Baldwin & Quan, 2002)
Drowsy Driving

- Public health hazard
- National Highway Traffic Safety Administration in the U.S.:
  - 100,000 police-reported crashes related to fatigue
  - 1,550 deaths
  - 71,000 injuries
  - $12.5 billion economic costs
- National Sleep Foundation
  - 51% adults admitted Drowsy Driving
  - 71% for ages 18 - 29

(http://drowsydriving.org)

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Summary

Health Problems / Not Enough Sleep

- Stroke
- High Blood Pressure
- Type-2 Diabetes
- Learning Problems
- Memory Problems
- Heart Disease
- Obesity
- Metabolic Syndrome
- Mood Disorders
- Depression
- Mental Disorders
- Kidney Disease
- Low Metabolism
- Hormone Problems
- Impaired While Driving
- Premature Death
- Insomnia
- Shorter Life Span
- Get Sick More Often

Without adequate sleep, you get sick, fat, and stupid.

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Sleep Diary

• A sleep diary is a very useful tool used to identify problems and disorders associated with sleep and the daily and nightly habits that are contributing to them.

• It is recommended that a sleep diary be kept for 2 weeks to note consistent behavioral patterns that may contribute to sleep loss.

• You can track your (or your client’s) symptoms and sleep patterns using a sleep diary, then make healthy changes in daily habits and bedtime routine.
12 Behaviors to Promote Healthy Sleep across the Lifespan
Healthy Sleep Behavior 1

- Products with caffeine (tea, coffee, cocoa, chocolate, sodas) should be avoided for at least 4 hours before bed.
- Caffeine is a stimulant that can keep you awake.
Healthy Sleep Behavior 2

- Avoid nicotine (including patches and nicotine gum) for at least 4 hours before bed and when you wake up during the night.
- Nicotine is also a stimulant.

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Healthy Sleep Behavior 3

- Avoid alcohol at bedtime for at least 4 hours before bedtime:
  - Although might make you feel sleepy at first, it can cause you to wake up at night (rebound insomnia) or may interfere with sleep quality;
  - Alcohol also has diuretic properties which also interrupts Sleep.
- No more than two glasses of an alcohol drink should be consumed per day if health permits:
  - Preferably red wine because of its health benefits.
Healthy Sleep Behavior 4

- Avoid eating a large meal immediately before bed (the 4 hour rule);
  - In particular, avoid spicy food before bed.
- A light snack can help promote sleep:
  - Banana (contains tryptophan, magnesium, potassium, B vitamins);
  - Glass of warm (not hot) milk (tryptophan);
  - Almonds (natural magnesium improves sleep quality);
  - Tart cherries (contain melatonin);
  - Chamomile tea (natural sleep aid).
Healthy Sleep Behavior 5

- Daily physical activity (even if it is a light, 20 minute walk) in the morning or afternoon
- Examples:
  - Dancing;
  - Running;
  - Sports;
  - Gardening;
  - Swimming;
  - Walking.
- If you are a person stimulated by exercise, avoid doing it in the evening as you might have trouble falling asleep.
Healthy Sleep Behavior 6

- Keep your bedroom tranquil and orderly.
- Pick sheets, comforters and pillows that are comfortable.
- Avoid your bedroom being too hot or too cold.
Healthy Sleep Behavior 7

- Keep your bedroom quiet and dark at night;
  - Spend time in natural light during the day
- Cover the windows with thick curtains to block light, or use a sleep mask for your eyes.
- If noise is a problem, use earplugs to drown out the sounds.
Healthy Sleep Behavior 8

- Only use the bedroom for 2 activities that begin with S:
  - Sleep and (no, not Smoking), Sex.
- Avoid watching TV, using the computer, reading, listening to music, speaking on the phone, or sending text messages in your bedroom.
- Turn off the TV, cell phone, iPad and computer a few hours before going to bed:
  - The type of light these screens emit may stimulate the brain, suppress the production of melatonin, and interfere with your inner biological clock.
Healthy Sleep Behavior 9

- Keep a set time for going to bed, including on weekends.
- Adults need at least 7 to 8 hours of sleep each night to feel refreshed and be productive.
- Do not ‘cat nap’ for more than 30 minutes during the day because it can cause you to not be able to fall asleep at night.
- NOTE: A nap or meditation lasting 20 to 30 minutes is good to energize your body, mind and spirit:
  - Sleeping more than 30 minutes during the day is not considered a nap and can affect your quality of sleep at night.
Follow a routine to help relax before sleep:
- Take a warm shower, or a bath with Epsom salts;
- Drink a cup of chamomile tea;
- Use guided imagery techniques;
- Practice progressive muscle relaxation;
- Postpone stressful tasks for the morning.
Healthy Sleep Behavior 11

- Set alarm, then put clock out of sight:
  - Checking time can contribute to insomnia.

- If unable to sleep within 30 minutes:
  - Get up, go to another room and do something that is not stimulating;
  - Return to bed when sleepy.

- If you unable to sleep within another 30 minutes:
  - Get up again; continue to do this throughout the night;
  - Do not nap the next day;
  - Return to bed at your regular time the next night and you will sleep;
  - You are re-training your biological clock.
If you find yourself worried before bedtime, make a list of things to do before you go to bed: this can help you not focus on these worries at night.

Try ‘muñecas’ (worry dolls); give each doll a worry thereby allowing you to sleep peacefully. You will awaken without worry because the dolls took them away during the night. Be sure to put the dolls in their bed so they can sleep during the day and be ready to worry for you at night.

Keep in mind that children worry too!
Additional Resources

National Sleep Foundation
http://www.sleepfoundation.org
(Se habla Español)

For more information:
http://healthysleep.med.harvard.edu


Quan SF, O'Connor GT, Quan JS., et al. (2007). Association of physical activity with sleep disordered breathing--the Sleep Heart Health Study. *Sleep Breath* 11:149-57.


