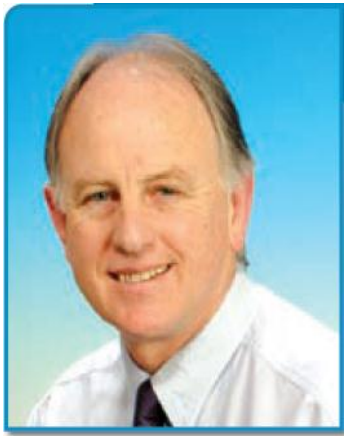
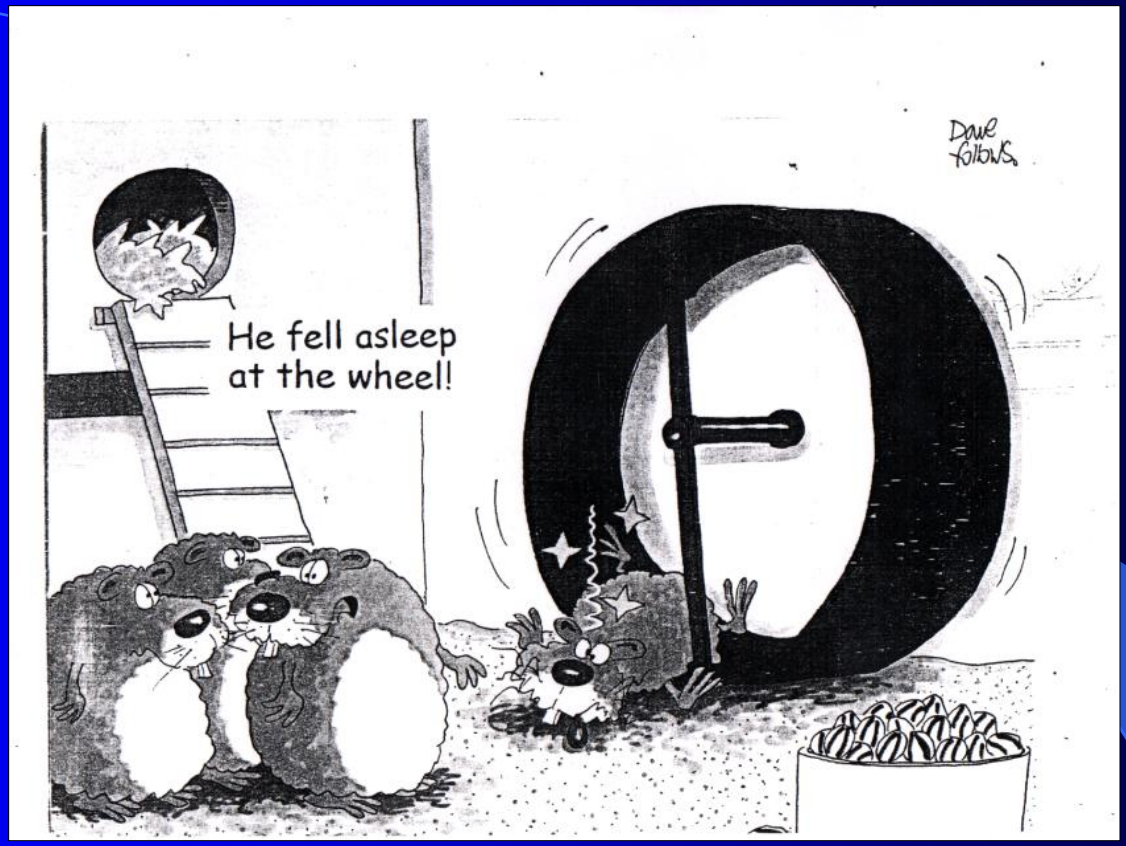


Dr Alex Bartle

Sleep Well Clinic

The impact of Sleep Disorders on General Practice, and how to spot them - Concurrent Workshop Repeated

Saturday, 22 June 2013	Start 11:00am	Duration: 55mins	Picasso
	Start 12:05pm	Duration: 55mins	Picasso



The impact of Sleep Disorders in General Practice, and how to spot them

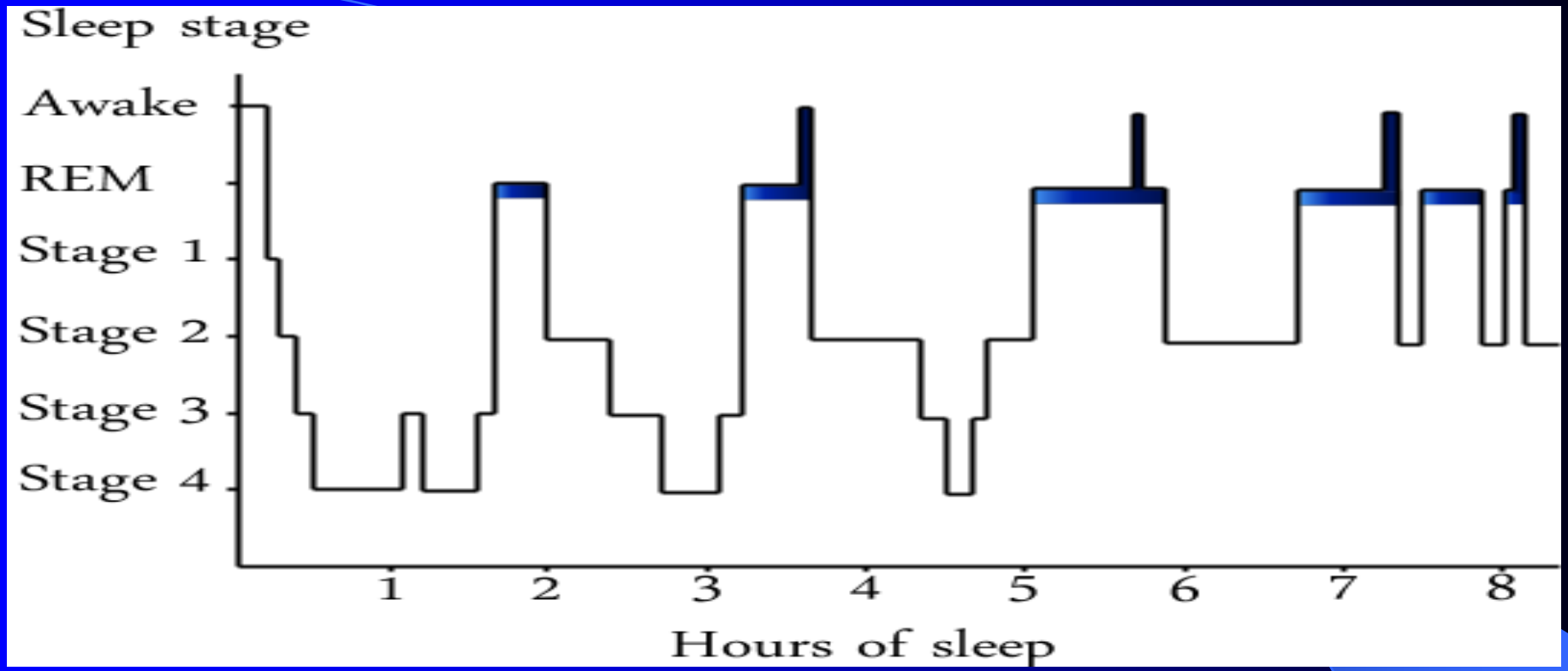
Programme.

- Why bother?
- The effects of sleep loss.
- Brief (but important) questions.

Why bother?

The three Pillars of health:

- Nutrition
- Exercise
- SLEEP



- REM - Rapid Eye Movement NREM - Non-Rapid Eye Movement
- Stages 1 and 2 light sleep Stages 3 and 4 deep sleep
-
- 90 -100 Minute sleep cycles. 4 – 5 cycles per night to feel refreshed
- 25% REM, 50% Stage 2 and 25% stages 3 and 4

Why bother?

SLEEP impacts on ALL aspects of our lives.

- Physically
- Cognitively
- Behaviouraly

PHYSICAL associations with Sleep Disorder

- Cardiovascular: Hypertension; MI; AF; CVA; CHF; Pulmonary Hypertension; ↑ CRP.
- Endocrine: Obesity; Insulin Resistance; ↑ Cortisol;↑ Lipids; ↓ Leptin; ↓ Libido
- Cancer: Increased risk (especially breast, also bowel)

PHYSICAL associations with Sleep Disorder

- Urological: Nocturia (may be frequent)
  Erectile Dysfunction
- Gastroenterological: GORD
- Gynecological: PCO; Menstrual irregularities
- Obstetric: Toxemia; Premature births; Low birth weighs

PHYSICAL associations with Sleep Disorder

- Musculoskeletal: Kyphoscoliosis
- Genetic: Down’s syndrome; Macroglossia etc.
- Neurodegenerative: Alzheimer's Disease; MS.
- Respiratory: Obesity-Hypoventilation syndrome; Idiopathic hypoventilation

PSYCHOLOGICAL consequences of Sleep Disorder

- Increased irritability & lower stress tolerance
- Poor Motivation (“Can’t be bothered!”)
- Faulty Judgment
- Lapses in Attention and Vigilance
- Impaired Decision Making & Logical reasoning
- Depression / Anxiety
- Personality Change

BEHAVOURAL consequences of Sleep Disorder

- Poor short term memory
- Risk taking
- Erratic driving
- Slower Reaction Time
- Increased Sensitivity to pain
- Hyperactivity in Children
- Accidentally falling asleep!

Fatigue was a major contributing factor for the following:

- Chernobyl, 1986 (1.30am)
- The grounding of the Exxon Valdez, 1989 (12.04am)
- Disastrous launch of the Challenger, 1986
- The Three Mile Island disaster, 1979 (4.00am)
- Bhopal Industrial Chemical spill

Sleep Statistics in New Zealand

Fatigue and Excessive Daytime Sleepiness (EDS)

General Population:

- 37% rarely or never get enough sleep
- 46% rarely or never wake refreshed

Those who felt that they rarely or never got enough sleep were 33% more likely to report a road accident

Fatigue and Excessive Daytime Sleepiness (EDS)

Youth:

- 50% 13yr olds getting less sleep on weekdays than they thought necessary
- 75% 16yr olds getting less sleep on weekdays than they thought necessary.
- 30% of both groups got less sleep than they needed at week ends.

Fatigue and Excessive Daytime Sleepiness (EDS)

Elderly: (65 and over)

- 93% considered that they had a sleep problem
- 11% considered that inadequate sleep was affecting them often or always
- 65% reported napping at least once per week
- 6% reported napping every day

The most common sleep disorders are associated with:-

1) Shiftwork

   Up to 20% of the workforce are shiftworkers

2) Insomnia

   10 – 15% of adults suffer from chronic and severe insomnia that affects daytime performance.

3) Snoring and Obstructive Sleep Apnoea (OSA)

   Snoring – up to 60% adults snore regularly
   OSAS – 9% of males, 4% females over 40

Brief questions:

- Do you have any concern about your sleep?
- Have you been told that you snore?
- Do you wake refreshed in the morning?

Brief questionnaires:

- Epworth Sleepiness scale (General feeling of Sleepiness in 8 situations)

- Stop-bang (Considering the possibility of OSA)

- Auckland Sleep Questionnaire (Is longer, but covers many aspects of sleep)

- Morningness-Eveningness Questionnaire

The Epworth Sleepiness Scale

How likely are you to doze off or fall asleep in the following situations, in contrast to just feeling tired?

This refers to your usual way of life in recent times.

Even if you have not done some of these things recently, try to work out how they would have affected you.

Use the following scale to choose the most appropriate number for each situation:

0 = would never doze
1 = slight chance of dozing
2 = moderate chance of dozing
3 = high chance of dozing

It is important that you put a number (0 to 3) in *each* of the eight boxes.

Situation	(0 – 3)
Sitting and reading	
Watching TV	
Sitting, inactive in a public place (eg a theatre or a meeting)	
As a passenger in a car for an hour without a break	
Lying down to rest in the afternoon when circumstances permit	
Sitting and talking to someone	
Sitting quietly after lunch without alcohol	
In a car, while stopped for a few minutes in traffic	
TOTAL	

Brief questions:

STOP-BANG

- 1. Do you **SNORE** loudly (louder than talking or loud enough to be heard through closed doors)?
2. Do you often feel **TIRED**, fatigued, or sleepy during daytime?
3. Has anyone **OBSERVED** you stop breathing during your sleep?
4. Do you have or are you being treated for high blood **PRESSURE**?
5. **BMI** more than 35?
6. **AGE** over 50 years old?
7. **NECK** circumference > 42 cms?
8. Male **GENDER**?

≥3 yes answers: High-risk for OSA
<3 yes answers: Low-risk for OSA

Brief questions:

Example Questions from the MEQ

(19 Questions)

1. What time would you get up if you were entirely free to plan your day?

2 What time would you go to bed if you were entirely free to plan your day?

7. During the first half-hour after you wake up in the morning, how tired do you feel?

12. If you got into bed at 11:00 PM, how tired would you be?

Thank You

Dr Alex Bartle
The SLEEP WELL Clinic
Throughout New Zealand
www.sleepwellclinic.co.nz