A CBT Approach to Stress Reduction

A Primer for Physicians.

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Learning Objectives

- To train physicians on the usefulness of cognitive behavioural approaches for stress management and well-being.
- To share tools that are useful for both physician’s own health and wellbeing and for their practice of medicine through interest groups and through larger group discussion
- To encourage discussion and consideration of lifestyle modification to improve physical and mental health
- Identify current positive and negative lifestyle factors influencing response to stress.
Stress

• Unhealthy lifestyle habits and increased levels of stress, anxiety, and depression are increasing across medical professionals (physicians, residents, medical students)

• There is evidence to suggest that poor self-care and emotional distress may also adversely impact the quality of care provided to patients
  – Medication errors, oversights, poorer mood/communication, etc.
Stress is a part of everyday life. It usually consists of an event (e.g., dealing with a difficult patient), and your reaction to the event. This may include a particular way of thinking (e.g., worrying), a feeling (e.g., tightness in the chest), or a behaviour (e.g., eating too much).
Stressful Event

• A stressful event is a **situation** or **something that happens** in our environment that makes us feel stressed.
• It could be as minor as being stuck in traffic or as serious as being fired from a job. We usually perceive these situations or events as being harmful, threatening, or challenging.

Stress

• Stress can be defined as the variety of **negative thoughts, feelings, and reactions** that accompany threatening or challenging situations.

What makes an event stressful is how we perceive it, feel about it and react to it.
How can I make my busy life less stressful?

1. Make time for you.
   - If you are having a hard time finding a space in your busy day/week to relax it is because you aren’t making time.
   - Use activity scheduling to organize yourself for things that need to get done AND for down time for yourself.
   - We often get so busy that there is not time to take a break and do something relaxing. If it is scheduled in you’ll be more likely to follow through and take the time off. You should not feel guilty- your other activities and demands will benefit from you having taken a break.
   - Pleasurable activities, activities that give you a sense of achievement, social activities.
Practice Assertive Communication

2. Situations can arise in personal relationships, at work, or casually in which we feel we are being taken advantage of. This can lead to increased stress. Assertive communication can be a way to avoid or deal with this stress.

<table>
<thead>
<tr>
<th>Passive</th>
<th>Aggressive</th>
<th>Assertive</th>
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<tbody>
<tr>
<td>• They are not likely to get what they need</td>
<td>• They are often not well liked</td>
<td>• People are responsive to their requests</td>
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<tr>
<td>• They are more likely to be taken advantage of</td>
<td>• People feel threatened and alienated by them</td>
<td>• There is a clear understanding of their wants, needs and feelings</td>
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<tr>
<td>• People do not always respect them</td>
<td>• They are not perceived as team players</td>
<td>• People feel respected by them</td>
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Recognize the toll stress takes on your body

3. Take time to practice deep breathing and/or progressive muscle relaxation
   – These are very easy to use, practical techniques to reduce your stress and feelings of tenseness.
   – Deep breathing is the first step: focuses on maintaining regular, steady breaths to help your body calm down.
   – PMR is a way to guide your muscles and body back into a relaxed state and away from feeling so stressed.
Watch your thoughts

4. When we are stressed we start to have more “catastrophic” ways of thinking. If you are feeling stressed, stop and listen to your thoughts.

– Is what you are thinking rational and logical? If not, challenge your thoughts and try and come up with clear, calm statements.

– Look for the evidence to support your irrational thoughts. If there is no evidence then perhaps your thoughts are not realistic and appropriate.
Sleep to keep well around the clock

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Learning Objectives

• Increase **awareness** about the consequences of inadequate sleep and fatigue

• Recognize **warning signs** of sleep deprivation and fatigue and your **barriers** to adequate sleep

• Learn **strategies** to improve sleep and manage fatigue
How much sleep do we need anyway?

- Varies with age and for each individual
- Young adults would spontaneously sleep average of 8.5 h/night if given the opportunity
- Adult residents sleep ~ 2 h/night < this amount
- Epidemiologic studies support optimal of 7-8 h of sleep per night

<table>
<thead>
<tr>
<th>Age</th>
<th>Sleep Needs</th>
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<tbody>
<tr>
<td>Newborns (0-2 months)</td>
<td>12-18 hours</td>
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<tr>
<td>Infants (3 to 11 months)</td>
<td>14 to 15 hours</td>
</tr>
<tr>
<td>Toddlers (1-3 years)</td>
<td>12 to 14 hours</td>
</tr>
<tr>
<td>Preschoolers (3-5 years)</td>
<td>11 to 13 hours</td>
</tr>
<tr>
<td>School-age children (5-10 years)</td>
<td>10 to 11 hours</td>
</tr>
<tr>
<td>Teens (10-17)</td>
<td>8.5-9.25 hours</td>
</tr>
<tr>
<td>Adults</td>
<td>7-9 hours</td>
</tr>
</tbody>
</table>

Source: National Sleep Foundation
Scope of the Problem

• Sleep deprivation is the “norm” during medical training and in medicine.
• Many residents and physicians recognize that their sleep is restricted and fragmented.
• Awareness plateaus over time.
Impact of Sleep Loss

• Sleep deprivation impacts mood, tolerance to stress, marital/family discord, motor performance, increases risk of alcohol and substance abuse and motor vehicle accidents

Fatigue related impairments in:
- Reaction time
- Hand-eye coordination
- Clerical accuracy
- Memory
- Reasoning

• Association between sleep hours and serious medical errors and conflicts with co-workers

• Dose-response relationship between the number of hours of acute sleep debt and these impairments

The Evolution of Sleep Problems and Psychological Outcomes Among Interns

- Chronic sleep deprivation, depression, burnout, and empathy increased from baseline to year end.

- Subjective sleepiness plateaus and may decrease even as objective sleepiness increases and performance declines.

Sleep Deprivation: The facts

• Performance declines start after approx. 15-16 hrs continued wakefulness
• Lowest alertness level after an “all nighter” is between 6-11 am (i.e., morning rounds)
• When sleep deprived we tend to underestimate our level of sleepiness & overestimate our alertness
• The sleepier we are the less accurate our perception of impairment/performance

American Academy of Sleep Medicine
Healthy Sleep Habits

Get adequate (7 to 9 hours) sleep before anticipated sleep loss. 
Avoid starting out with a sleep deficit!
Healthy Sleep Habits

• Sleeping environment:
  – Cooler temperature
  – Dark (eye shades, room darkening shades)
  – Quiet (unplug phone, turn off pager, use ear plugs, white noise machine)
• Avoid going to bed hungry, but no heavy meals within 3 hours of sleep.
• Get regular exercise but avoid heavy exercise within 3 hours of sleep.
Healthy Sleep Habits

• Go to bed and get up at about the same time every day.
• Develop a pre-sleep routine
• Use relaxation to help you fall asleep (PMR, deep breathing)
• Protect your sleep time; enlist your family and friends! Use time off to catch up on sleep.
Napping

**Pros:** Naps temporarily improve alertness.

**Types:** preventative (pre-call)
- operational (on the job)

**Length:**
- **short naps:** no longer than 30 minutes to avoid the grogginess (“sleep inertia”) that occurs when you’re awakened from deep sleep
- **long naps:** 2 hours (range 30 to 180 minutes)
Recovery from Sleep Loss

**Myth:** “All I need is my usual 5 to 6 hours the night after call and I’m fine.”

**Fact:** Recovery from on-call sleep loss generally takes 2 nights of extended sleep to restore baseline alertness.

**Fact:** Recovery sleep generally has a higher percentage of deep sleep, which is needed to counteract the effects of sleep loss.
Caffeine

- *Strategic* consumption is key
- Effects within 15 – 30 minutes; half-life 3 to 7 hours
- Use for temporary relief of sleepiness
- Cons:
  - disrupts subsequent sleep (more arousals)
  - tolerance may develop
  - diuretic effects
Physical Activity and Stress

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There are many ways exercise can help alleviate stress.

• When we’re stressed out our muscles are tight. Exercise is a natural way to release muscle tension.

• When people exercise they can focus their thoughts elsewhere. It is a way to break that cycle of stressful thoughts and be in the present moment. Some people report that when they exercise they are “in the zone”. This can be similar to meditating and is great for stress reduction.

• Our bodies produce healthy, “feel-good” chemicals (endorphins) when exercising.
Recent research has shown that exercise can also bring about longer term changes. The way our brain releases and uses chemicals (neurotransmitters) may be modified over time with regular exercise. These longer term changes, such as more resistance to stress and anxiety, come about only after having been engaged in regular exercise for some time.

Integrating exercise into your stress management program

#1 Make sure exercising is safe for you

Before making significant changes in your physical activity regimen, it is important to make sure that it is safe for you to do so. Completing the Physical Activity Readiness Questionnaire is an easy way to make sure everything is OK.

#2 Slow and steady wins the race

The excitement of a new exercise program and enthusiasm can sometimes make people want to do more than they should. It is important to develop physical activity habits into a regular and sustainable part of your daily routine. Overdoing it early on can lead to fatigue, injury and a non-sustainable program. It is best to start off slowly and increase your activity levels at a regular pace.

**Use the 5% rule:** Never increase the duration or intensity of your exercise by more than 5% from one session to the next.
It is important to make time for physical activity as it doesn’t make time for itself. If you want physical activity to be a regular part of your routine you must pencil it in. When people are stressed they are also busy or have other things that, at a particular time, may seem more important than exercise. Making time in your schedule and sticking to it will help you be more successful at integrating physical activity into your life.

Be creative. Physical activity can happen when you aren’t even aware. Ride a bike to work. Go for a walk with a friend to catch up. Try going before work so you can relax after work. Also, exercise energizes you so although you may feel tired after work, you'll find that you have more energy than you thought and it will help you sleep better.
#4 Find an activity that works for you

This means do something practical that you like. Picking up a new sport that is very expensive just because your friend engages in it may not be the best alternative. Also, going swimming because there is a pool near your house sounds like a great idea...unless you hate swimming! It will be easier to sustain and more pleasurable to do if you pick something that fits in terms of time, activities you enjoy, social circles, and budget.
How much exercise do you need to do?

• Health Canada currently recommends that you get 30-60 minutes of moderate exercise a day, most days of the week. This means you should aim to get at least 2.5 hours of exercise a week.

• To get the most out of the exercise in terms of stress reduction, it is better to engage in exercise on a regular basis (as compared to one very intensive burst a week). Benefits will be spread over the course of the week if exercise is more regular.
Group discussions

• 3 topics
• 15 minutes per topic
• Expert available for each topic
Barriers

• What barriers do you perceive in applying these techniques
• Barrier worksheet to guide you with this
Wrap Up

• Final comments
• Suggestions
• Thank You!