Have you had to deal with these Cardiac Rehab (CR) clinical situations?

• Patients who panic about having another heart attack.

- Patients who cannot find the energy or motivation to do their exercise prescription.
- While talking to one patient in your class, another starts crying.
- Patients who worry they will never recover enough to get back to a normal life.
- Patients who awakens at night with nightmares, chest pain or tachycardia.
- Patients whose spouse tells you their partner is agitated, hopeless or abusive.
- Patients who start CR energetically, but are overcome with worries and moodiness.
- Patients who cannot afford to buy a medically necessary CPAP machine.

What strategies do you routinely use to manage your CR patients with many *psychosocial stress* problems? When you have to deal with any of these psychosocial complications, it is important to have a clear intervention strategy to effectively respond to these challenges.

Attend this full day training to obtain:

- A better clinical understanding of how stress impacts your CR patients.
- Latest simple clinical tools to easily evaluate *psychosocial stress* challenges.
- A basic understanding of beneficial treatment strategies to use with your CR patients.

Why should you attend this hands-on training session? Stress and sleep problems occur when the body's major survival and adaptive system, the Autonomic Nervous System (ANS), is overwhelmed by chronic stress or trauma. Up to half of all CR patients have serious problems with chronic stress or disturbed sleep. Learn to identify these quickly and take steps to intervene and help them recover.

This full day of interactive hands-on training teaches you everything you need to manage psychosocial stress challenges. Integrate screening strategies and brief interventions to improve outcomes with your Cardiac Rehab patients.

## **REGISTER NOW!**

To register for this full day of training visit www.NeuroRelaxation.com and follow the links

## National Guidelines & Practice Recommendations INTERHEART (2004)

"Presence of psychosocial stressors is associated with increased risk of acute myocardial infarction, suggesting that approaches aimed at modifying these factors should be developed."

## Current CACPR Guidelines (2009) for managing Psychosocial Stresses:

- 6.1 All cardiac rehabilitation patients should undergo screening for active and historical depression and anxiety at the time of the intake assessment.
- 6.11 All cardiac rehabilitation patients should undergo screening for potential sleep disorders.
- 6.12 Cardiac Rehabilitation patients with an identified sleep disorder should undergo screening for sleep apnea with a validated screening instrument.
- 6.5 Patients who identify ongoing stress, but who are not actively depressed or anxious should be offered participation in stress management programmes.
- 6.9 Non-adherent patients should be gently queried about their emotional status, including mood and their enjoyment of life and followed up with appropriate intervention.
- 6.2 Individuals who screen positive for depression or anxiety should be referred for assessment or treatment by a qualified professional such as a psychologist or a psychiatrist.

### **Prevalence of Sleep Apnea**

"70% of consecutive cardiac rehab patients who attended a sleep lab study (44 of 62) had clinically significant sleep apnea (AHI >15) which did not improve with exercise." **(Mendelson et al, 2016)** 

## AHA Scientific Statement: Sleep Duration and Quality -Impact on Lifestyle Behaviors & Cardiometabolic Health (2016)

"Our review of the epidemiological data on the impact of sleep duration and disorders on cardiovascular health suggests the following:

- \* Both short- and long-term duration sleep and sleep disorders such as Sleep Disordered Breathing (SDB) and insomnia are associated with adverse cardio metabolic risk profiles and outcomes.
- \* Development and evaluation of simple sleep behaviour screening tools that could be used in busy clinical or public health settings is critical.

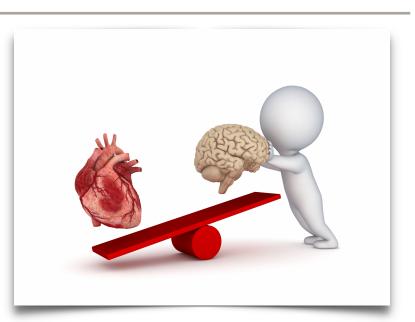
## **American Diabetes Association**

## (Diabetes Spectrum, Feb 2016, p3)

"We hope this *From Research to Practice*' section will stimulate interest in exploring the complex associations between sleep and diabetes, highlight the need for routine clinical assessment of sleep disturbances for patients with diabetes, and encourage the development of interventions to reduce sleep disturbances in this population."

# SCREEN & INTERVENE

# STRATEGIES FOR INTEGRATING THE 'HEART-BRAIN' CONNECTION INTO CR



## Friday, October 19, 2018 Toronto, Canada

The most comprehensive international study of first heart attacks (INTERHEART) concluded that "...raised lipids (cholesterol) smoking, and psychosocial factors were the most important risk factors in all regions of the world."



Upgrade your skills in implementing CACPR Guidelines for managing the Psychosocial Stress challenges of your CR patients!

## WORKSHOP AGENDA

## Learn to apply the results of the latest medical research in four critical domains necessary to obtain better CR outcomes

## The 'Heart-Brain' Connection The Autonomic System (ANS) and Heart Health

## First Morning Session - You will be guided through the following topics:

- I. Why the ANS is important for CR: Stress is a top three risk factor for cardiac events.
- 2. Expert Overview of the ANS **Dr. Reitav** will review principles of Polyvagal Theory:
  - a. *An 'hierarchial' ANS* describe the three underlying neural circuits of the ANS, the Parasympathetic, Sympathetic and Social Engagement Systems.
  - b. *Neuroception*" how the ANS operates normally (in health), and what happens when it is overwhelmed by a major medical or psychological event.
  - c. *"Co-regulation"* stabilization of the ANS requires *safety, neuromodulation and co-regulation*; how you can actively promote stabilization is reviewed.
  - d. *Heart Health* you can help CR patients return to heart health by helping stabilize the ANS, as well as exercising and attending to cardiac risk factors.
- 3. Reflection and Integration: What you plan to do to help stabilize patient' ANS.

## NUTRITION BREAK

Participants will be able to interact with peers from other Cardiac Rehab programs.

## Screen and Intervene I Sleep Apnea: the Stealth Cardiac Risk

#### Second Morning Session - A focus on sleep and how it impacts health risks:

- Why Sleep is Important for CR: Left untreated, sleep apnea significantly increases risks of poor treatment outcomes, more morbidity and mortality for half of your CR patients.
- 2. Expert Overview of Sleep **Dr. Thirlwell** will review:
- a. Neurophysiological underpinnings of the awake, REM and non-REM states.
- b. Neurophysiology of obstructive sleep apnea (OSA) and how hypoxia kills.
- c. Referral for sleep studies: Sleep labs and home studies.
- d. Effective treatment options: CPAP, APAP and Bi-PAP.
- Hands-on Experience: Screening instruments for sleep apnea and insomnia: implementing two brief and effective screening protocols (STOP-BANG and SCI).
- 4. Patient Education: Communicating with patients to increase response to interventions.
- 5. Handling Resistance to CPAP Treatment: Case Study of resolving CPAP phobia.
- 6. Reflection and Integration: Your plan to implement sleep interventions with CR patients.

## LUNCH BREAK

Participants will be able to interact with SPONSORING CPAP PROVIDERS to increase your knowledge about sleep studies, OSA and CPAP treatment.

## Screen and Intervene II Depression, Anxiety and Psychological Distress

#### First Afternoon Session - The importance of screening for stress:

- I. Hands-on Experience: Screening for depression, anxiety and psychological distress.
- 2. Expert Overview of Screening **Dr. Lanctot** will review:
  - a. Evidence for valid screening protocols to identify these conditions in CR patients.
  - b. These clinical syndromes negatively impact outcomes, morbidity and mortality.
- 3. Expert Overview of Neuromodulation **Dr. Reitav** and **Dr. Miri** will review:
  - a. *Neuromodulation* Chronic stress is reduced by interventions that target rebalancing of the ANS, like Stress Management Training (SMT), that reduce cardiac events on top of the reductions achieved with CR exercise alone.
  - b. *Innovation*: Application of Pulse Electro-Magnetic Fields and promising new technologies.
  - c. *Neural Exercises*: Guiding patients to use breathing exercises to boost parasympathetic activity and reduce sympathetic hyperarousal.
- . Reflection and Integration: How do you plan to integrate screening and neuromodulation in our work?

## NUTRITION BREAK

Participants will be able to interact with patients and volunteers of UHN-TRIs 'A Better You" program to discuss treatment invention and results.

## Screen and Intervene III Trauma and Chronic Autonomic Dysregulation

#### First Afternoon Session - Understanding the impact of trauma:

- 1. Hands-on Experience: Screening for Adverse Childhood Experiences (ACEs) and PC-PTSD.
- 2. Expert Overview of Psychological Intervention: **Dr. Reitav** will review:
  - a. *NeuroRelaxation* Outline of an innovative skills-training behavioural program that integrates Sleep with Stress Management Training (an SSMT Program).
  - b. *Trauma*: Understanding that cardiac events can trigger traumatic reactions that impact anxiety and depression negatively and can result in PTSD, a more chronic, dysregulated condition that usually requires individual treatment.
  - c. *EMDR Therapy*: Individual treatment that targets stabilization of the ANS and then reprocessing traumatic experiences can resolve panic and depression effectively.
- d. Case Studies to illustrate how trauma after a cardiac event can be resolved.
- 3. Expert Review of Accessing Community Resources: **Clare Peddle** will review how to find community based resources to address psychosocial needs of cardiac patients.

**REGISTER NOW!** 

Reflection and Integration: How do you plan to address these more chronic conditions?

# obtain better CR outcomes

## **Biographical Sketches of Facilitators**



**Dr. Jaan Reitav** is a Clinical Psychologist at UHN-TRI's Cardiovascular Prevention and Rehabilitation Program in Toronto and a Professor of Clinical Diagnosis at CMCC. He has twelve years of experience with assessment and treatment of patients in Cardiac Rehab. Dr. Reitav

contributed to the Guidelines for Psychosocial stresses in the 3rd Edition of the *Canadian Guidelines for Cardiac Rehab* and has developed behavioural treatments for the many stressed and sleep problems that Cardiac patients present with. Dr. Reitav is certified in Behavioural Sleep Medicine and EMDR Therapy. He conducts training in *Neurorelaxation*, an integrated approach to clinical management of stress and sleep problems of medical patients.



**Dr. Celeste Thirlwell** is a Neuroscientist, Psychiatrist and Sleep Medicine Specialist with a background in Electrophysiology Research and Neurosurgery. She is the founder of the Sleep Wake Awareness Program (SWAP) which integrates cutting edge neuroscience-based

techniques with standard sleep medicine practices. SWAP is one of the few clinics globally that analyses polysomnographic data from overnight sleep studies for sleep instability, which is associated with Autonomic Nervous System (ANS) instability. Her areas of clinical expertise include: Sleep instability and ANS dysfunction as they pertain to Fibromyalgia Syndrome/ Chronic Fatigue Syndrome (FMS/CFS), PTSD, Insomnia, Post Concussion Syndrome (PCS) and non-compliance with CPAP.



**Dr. Krista Lanctot** is a Senior Scientist, Hurvitz Brain Sciences Research Program, Sunnybrook Research Institute and Toronto Rehabilitation Institute Cardiac Rehab and Professor of Psychiatry and Pharmacology/Toxicology, University of Toronto. Dr. Lanctot leads research to understand the reasons for neuropsychiatric symptoms and

cognitive problems in those undergoing rehab and develop and test better treatments. She has over 250 publications and Co-Chairs the Canadian Stroke Best Practices and Standards Advisory Committee, Mood and Cognition writing group nationally and the Neuropsychiatric Symptoms Professional Interest Area of the Alzheimer Association internationally.



**Dr. Diva Miri** is a European Medical Graduate with a background in Neuroscience, trained in innovative healing technologies including noninvasive neuromodulatory lowintensity frequency interventions such as Low Level Laser Therapy (LLLT) and Pulsed ElectroMagnetic Field (PEMF) Therapy. She currently supervises the LLLT and PEMF

treatment protocols at the SWAP Clinic in Toronto for patients suffering from Insomnia, Sleep Instability, Fibromyalgia/Chronic Pain, PTSD and Post-Concussion Syndrome. Her specialization in Frequency Medicine is based on fundamental neurobiological healing through natural modulatory mechanisms.



**Clare Peddle, MSW, RSW** is a Social Worker at UHN-TRI's Cardiovascular Prevention and Rehabilitation Program in Toronto. She has eighteen years of experience in assessing and arranging for community resources for patients recovering from major medical problems. She advocates on their behalf to ensure they receive services they are eligible for.