Synthetic Opioids and the Non-medical Use of Prescription drugs: A new Challenge to Public Heath

Thematic session 3: Synthetic opioids and the non-medical use of prescription drugs pose increasing risks to public health and safety, as well as scientific, legal and regulatory challenges, including with regard to the scheduling of substances.

Commission on Narcotic Drugs, 62nd session, 6th Intersessional Meeting, 16-18 October 2019

D. Pabasara P. Weerasinghe
Assistant Director (Scientific Research)
National Dangerous Drugs Control Board
DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
Initiative actions taken by the Government of Sri Lanka
- Establishment of comprehensive, balanced and coordinated scientific strategy for Sri Lanka national policy for prevention and control of Drug Abuse
WELCOME

INGSA provides the forum for policy makers, practitioners, national academies, scientific societies, and researchers to share experience, build capacities, and develop theoretical and practical approaches to the use of scientific evidence in informing policy at all levels of government.

Meet the 2019 INGSA Research Associates

Global South researchers investigate the obstacles and solutions for evidence-informed policy in their region.
Expert Meeting on Comprehensive, Balanced and Coordinated Scientific Strategy to Counter Illicit Drug Trafficking and Prevention and Control 05th-06th March 2019, Colombo, Sri Lanka
Establishment of Science, Technology and Innovation (STI) platform

STI Processes and Partnerships for Prevention and Control of Drugs trafficking and abuse

NDDCB
Health Care Providers
Law Enforcement

NDDCB/UNIVERSITIES & PVT. AGENCIES

NDDCB, Health Care Providers
Law Enforcement
All stakeholders in the STI platform

Multidisciplinary, integrated, **NOT** disjointed, actions

- Scientists & Technologists, Sri Lankan expatriates
- International Networks and Partners
- Law enforcement, criminal justice system, Health Authorities etc.
- Policy makers, Regulators & Gov. administrators

Co-identify, co-plan, co-design, co-strategize and co-implement

STI Platform for Prevention and Control of drug Abuse
The STI platform - A multi-stakeholder online communication channel

- Facilitate collaboration and partnerships to coordinate drug prevention and control activities and to work together with NDDCB
  
  - the drug law enforcement agencies, health authorities, criminal justice agencies, education sector agencies, scientific community, academia, local governments, NGOs, private sector agencies, civil societies, industry, eligible knowledge-brokers and general-public
MOU on National Laboratory Network on Analysis and Testing of Dangerous Drugs (NLNATDD)
NLNATDD

The National Narcotics Laboratory

Sri Lanka Anti-Doping Agency

Sri Lanka Atomic Energy Board
Guideline on Science Advice on National Drug Policy Making (Preparation in progress)
Establishment of Scientific Subcommittee under NDDCB to improve scientific advice for drug prevention and control activities
Science to identify the root cause of the drug dependence
Trigger/ Cue
(Sight, smell, thought, emotion body sensation)
Trigger

Think of something smart or funny

Positive Affect

Positive reinforcement

CRAVING

Associate Tweeting with Increased Positive Affect (getting likes and retweets)

Tweeting feels good

TWEET
Based on past memories and learned lessons, skills and attitudes.
Most of our demand reduction strategies are targeted on the secondary problems.

Based on past memories and learned lessons, skills and attitudes.

DRUG → MENTAL IMAGE → SENSATION (Pleasant/unpleasant) → FEELING → MENTAL CONSTRUCTION

NEGATIVE CONSEQUENCES → REACTION TO TAKE THE DRUGS
Substance abuse is connected with the sensations not with the drugs.

Based on past memories and learned lessons, skills and attitudes.
Do our demand reduction strategies target the root cause where the primary problem exists?

Based on past memories and learned lessons, skills and attitudes.
Avoidance of Cues

Positive Affect
- Happy, relaxed

Negative Affect
- Stressed out

CRAVING

Smoke or Eat

Reinforcement via
- Increased Positive Affect or
- Decreased Negative Affect

Substitute Behaviors

Smoking or eating makes you feel better
Avoidance of Cues

Positive Cue: Eat a good meal or go for a walk.
Neutral Cue: Get into the car.
Negative Cue: Yelled at by a boss.

Positive Affect: Happy, relaxed.
Negative Affect: Stressed out.

CRAVING

Mindfulness

SMOKE or EAT

Reinforcement via Increased Positive Affect or Decreased Negative Affect

Smoking or eating makes you feel better.

Increased salience

Positive reinforcement

Negative reinforcement
Effects of Mindfulness-Oriented Recovery Enhancement on reward responsiveness and opioid cue-reactivity

Authors

Eric L. Garland, Brett Froeliger, Matthew O. Howard

Mindfulness for Chronic Pain and Prescription Opioid Misuse: Novel Mechanisms and Unresolved Issues

Eric L. Garland & David S. Black

Pages 608-611 | Published online: 11 Mar 2014
Mindfulness may reduce opioid cravings, study finds

Opioid users, chronic pain sufferers may experience fewer relapses and greater well-being

*Date:* October 15, 2019

*Source:* Rutgers University

*Summary:* People suffering from opioid addiction and chronic pain may have fewer cravings and less pain if they use both mindfulness techniques and medication for opioid dependence, according to researchers.
Effectiveness of Mindfulness-Based Group Therapy Compared to the Usual Opioid Dependence Treatment

Saeed Imani, PhD, Mohammad Kazem Atef Vahid, PhD, Banafsheh Gharraee, PhD, Alireza Noroozi, MD, Mojtaba Habibi, PhD, and Sarah Bowen, PhD

* Author information * Copyright and License information Disclaimer
Mindfulness-Oriented Recovery Enhancement remediates hedonic dysregulation in opioid users: Neural and affective evidence of target engagement

Eric L. Garland¹, ², *, Rachel M. Atchley³, Adam W. Hanley¹, ², Jon-Kar Zubieta⁴ and Brett Froeliger⁵

See all authors and affiliations

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DOI: 10.1126/sciadv.aax1569
Mindfulness-Based Treatment May Ease Opioid Addictions

17 October 2019

by: Shannon Kelleher
Abstract

Addiction neuroscience models posit that recurrent drug use increases reactivity to drug-related cues and blunts responsiveness to natural rewards, propelling a cycle of hedonic dysregulation that drives addictive behavior. Here, we assessed whether a cognitive intervention for addiction, Mindfulness-Oriented Recovery Enhancement (MORE), could restructure reward responsiveness from valuation of drug-related reward back to valuation of natural reward. Before and after 8 weeks of MORE or a support group control, prescription opioid users (N = 135) viewed opioid and natural reward cues while an electroencephalogram biomarker of target engagement was assessed. MORE was associated with decreased opioid cue-reactivity and enhanced capacity to regulate responses to opioid and natural reward cues. Increased positive affective responses to natural reward cues were associated with decreased craving and mediated MORE’s therapeutic effects on opioid misuse. This series of randomized experiments provide the first neurophysiological evidence that an integrative behavioral treatment can remediate hedonic dysregulation among chronic opioid users.
Mindfulness practice based intervention as a preventive measure to reduce the severity of drug abuse at school level
Mindfulness practice based intervention

1. There has been a global trend to introduce and to integrate mindfulness practice in the Education sector to help children learn, self management & improve soft skills. We are in the process of exploring how mindfulness practice would help address the root course of this problem first at individual level then at the societal level.

2. There is a growing body of evidence to suggest that practice of mindfulness is effective and impactful in addressing root courses of drug-related issues by preventing the drug abuse, reducing relapse rate and thereby as a solution to overcrowding in prisons and treatment settings.
Mindfulness practice based intervention in school setting

Sharing of UK Experience......

Mindfulness to help children's mental well-being in schools

Over 6,000 teachers in the UK have been trained to teach mindfulness, according to the Mindfulness Initiative, and that number is growing all the time.

It's a meditation technique being used to help pupils improve their mental well-being.

Tallulah Berry went to visit one primary school in London to find out from the pupils themselves how it makes them feel.

Video Journalist: Hannah Geibart

© 24 Feb 2017 | UK
Here’s how the mindfulness practice means to kids in the UK school.

Safaa
Age 6

It makes me breathe out all of the things I had to worry about.

Martha
Age 7

Otherwise I would be excited and wouldn't be able to do my work.

Inigo
Age 7

We go in bubbles and we breathe in and out which calms us down.

You really think about your thoughts.
School-based drug prevention using mindfulness based practices in Sri Lanka
“Sati Pasala”, “Mindful school” programme for improve mindfulness in school settings

• This programme aims at sharing mindfulness with students, teachers, and entire school and university communities, as well as those in other relevant sectors.

• This program is based on a not-for-profit concept, is free from ethnic/religious dimensions and welcomes anyone to be part of the Sati Pasala community.
Mindfulness practice based new treatment modalities to better assist drug dependent persons in their recovery processes with reduced relapse rate
(As a solution repeated offenders and readmissions to treatment settings)
Mindfulness practice based rehabilitation in the UK prisons

Dangerous prisoners taught mindfulness and meditation

The mindfulness courses for high risk prisoners are designed to improve behaviour and self-control
Mindfulness practice based rehabilitation in USA prisons
Mindfulness practice based rehabilitation in Indian prisons
Thank you for your kind attention.....