Addictions: A Systems Approach via Social Innovation, Creativity, and Mindfulness

A Social Systems Perspective

Mike Unrau, PhD (c)
msunrau@mail.ubc.ca
University of British Columbia
(Torrance, 1962)
A Complex Challenge: Addiction

50% of Canadian males with chronic PTSD, have challenges with substance abuse.

(Veteran Affairs Canada, 2019)
PTSD

Canada has one of the highest rates of PTSD, with about one in ten people having lifetime symptoms

(Van Ameringen, Mancini, Patterson & Boyle, 2008)
In the Canadian total population, 75.9% reported lifetime exposure to one or more traumatic events

(Van Ameringen, Mancini, Patterson & Boyle, 2008).
Collective Trauma

Effects are: impacts on families and communities, loss of social trust, loss of communality, loss of social capital (Somasundaram, 2014)

If we apply it to the “collective” of individuals who’ve experienced trauma or have PTSD:
- 1 in 10 have PTSD
- 76% of population reported lifetime exposure to trauma

Could similar loss of communality and social capital result?
Complex Issue

“Wicked problem” or “social messes,” are complex problems that are ill-defined, not linear, are not causal, and require prototyping (Rittel & Webber, 1973)

Relationship between Addictions, PTSD and trauma
American Addiction Centers, 2019
Systems View: BioSocial Horizon Lines

(Based on: Lowe, 2011)
MultiSystem Approach to Mental Health

(Kaplan et al., 2000)
“The view of drug addiction as a systems failure should help refocus our general approach to developing dynamic models and early comprehensive interventions that optimize the ways in which we prevent and treat a complex, developmental disorder such as drug addiction.”

(Baler & Volkow, 2011)
Complex Adaptive Systems:

- Complex social systems, have key features.
  - **Nonlinear** - dynamic, stochastic cross scales and domains
  - **Emergent** - inherently difficult as parts lead to whole properties that are different than parts
  - **Heterogeneity** - properties are different and distinctly non-uniform
  - **Feedback** - amplifying loops
  - **Adaptive** - change according to environment
  - **Autopoiesis** – self-maintain and self-regenerate

(Miller & Page, 2009)
Complex Adaptive Systems:

Complex social systems, have key features.

- **Nonlinear** – not cause and effect solution to addictions
- **Emergent** – cultural norms, media, trade, new drugs
- **Heterogeneity** – diverse backgrounds of clients, communities, drugs
- **Feedback** – amplified: needs more drug to obtain the same effect
- **Adaptive** – drug network adapts to enforcement, fall between cracks
- **Autopoiesis** – low self esteem can retraumatize someone

(Randle, Stroink & Nelson, 2014; Gabora & Unrau, 2018)
“Towns adapt to citizens, while citizens also adapt to towns”

Miller & Page, 2009, p. 20

“Communities adapt to individuals, while individuals also adapt to communities”
Adaptive Cycle: How Systems Work

1. Preparing for change
2. Navigating the transition
3. Building resilience of the transformed system

Triggers:
- Poverty trap
- Rigidity trap

Trigger: creating a window of opportunity for change

Phases of transformation from Olsson et al. (2004)

(Biggs, Westley & Carpenter, 2010)
Adaptive Cycle for Addictions

(Adapted from Biggs, Westley & Carpenter, 2010)
Systems View: BioSocial Horizon Lines

(Based on: Lowe, 2011)
Panarchy

**System 3**: Gov’t policy, societal structures, media influence, etc.

**System 2**: Community, (other users, resources – or lack of them)

**System 1**: Individual, Trauma response, etc.

Randle, Stroink & Nelson, 2014
Resilience

- move out of the self-orientation stage
- into a new exploitation stage
- while still providing a certain level of net social utility
Social Innovation

“a complex process of introducing new products, processes or programs that profoundly change the basic routines, resource and authority flows, or beliefs of the social system in which the innovation occurs. Such successful social innovations have durability and broad impact”

Social Innovation – Example 1:

Chemical (USFDA)
- naltrexone to treat alcohol / opioid addictions in 2010
  US Dept. of Health & Human Services, 2013

Harm Reduction:
- Vermont’s *Second Chance Act*. Minor charges kept clean
- Project VISION: crime, prevention & neighborhoods
  US Senate, 2015
- Portugal’s harm-reduction orientation, decriminalization (Burger, 2013)
- Recovery Guidance ([https://recoveryguidance.com/](https://recoveryguidance.com/))

Impact Canada:
- HarmCheck: Rapid, Quantitative Opioid Drug Checking by Paper Spray Mass Spectrometry (PS-MS) (Health Canada, 2019)
Social Innovation – Example 2:

Rat Park

◊ addiction is more than chemical.
◊ Since, mixed results
◊ Contemporary results:

   Addiction is environment
   Gage & Sumnall, 2018;
   Mate, 2009, Hari, 2017)
◊ Or... is it?
The Kiloby Center for Recovery, CA

1st substance abuse treatment center in the U.S. to focus primarily on mindfulness.

The Natural Rest House specializes in the treatment of addiction along with co-occurring disorders such as trauma/PTSD, depression and anxiety.

www.kilobycenترك.com
Patient Progress on Trauma

(Among 33 patients in treatment between 11/27/2017 and 12/31/2018 with at least 1 progress survey response)

Symptoms Label
- Probable PTSD
- Severe PTSD

- 76%
- 15%
- 61%
- 12%
- 9%
Treatment Completion Rate vs. National Average

(24 Kiloby IOP discharges vs. 185,451 2016 TEDS-D IOP discharges)

Kiloby IOP: 42%
Successful Completion

IOP National Avg.: 32%
Successful Completion
Expressive Arts Group Intervention (controlled study)

- alleviate symptoms of trauma and enhance life satisfaction and hope?
- age between 15 and 18 were allocated into a 10 session 5 weeks

Tests: PTSS, HSCL-25A, CLS, ELS.

- Creativity may help construct meaning & connection

(DeMott, et al., 2017)
Social Innovation – Example 4:

✧ World Arts Organization:  [www.worldartsorg.com](http://www.worldartsorg.com)

✧ **Expressive Arts in Transition (EXIT) and Community Ritual: Moving towards Belonging after Trauma and Displacement.**

✧ The European Graduate School
  - *PhD’s in Expressive Arts* ([expressivearts.egs.edu](http://expressivearts.egs.edu))
Social Innovation Framework

Practitioners, Agencies, Policies

If we want to understand how complex challenges work, we need to understand how we understand.
Whole Systems View: Relational Spheres
Whole Systems: Experiential Relating

Diagram:

- Personal
- Social
- Internal
- External
- Objects
- Institutions / Community
- Self
- Others
Whole Systems: Addictions

- **Objects**: Relationship of control, release
- **Self**: Relationship of deficiency
- **Others**: Relationship of need
- **Institutions / Community**: Relationship of isolation

Diagram:
- Personal
- Social
- External
- Internal
Whole Systems: Client

2. Object - Relating
   Usage-reduction, harm-reduction, non-objectification

3. Self - Relating
   Trauma-reduction, self-love, mindfulness, creativity, self-care

4. Community - Relating
   Peer-to-peer programs, volunteerism, responsibilities, lawfulness, employment

1. Other – Relating
   Boundary creation, communication skills, non-judgement, compassion

Personal Innovation

Social Innovation

Internal

External
Whole Systems: Agencies in Innovation

1. **Innovations - Individual**
   - How do we relate? (self, objects / ideas, others, institution)
     - creativity, mindfulness

2. **Innovation - Objects**
   - New ways of substance-use & harm-reduction

3. **Innovations - Social**
   - Community economic development, peer-to-peer group development, social-entrepreneurship

4. **Innovations - Systems**
   - Law reform, policy-change, inter-departmental relating
Whole Systems: Barriers to Systems Innovation

1. Whole Systems: Barriers to Systems Innovation
   - Worldviews
   - Ideologies
   - Belief-orientations
   - Habituations
   - Dispositional patterns
   - Collective histories

Innovations - Individual
How do we relate? (self, objects / ideas, others, institution)
- creativity, mindfulness

Personal

Internal
The World
"Them"

My World
"We"

Their Self
"You"

No-Mind
Mindscape

Presentview

TRANSFORMATION / Society
(Social Labs, social enterprise)

Complex Social Challenges:
war, poverty, environmental...

RELATION / Self
(entrepreneurship,
Leadership, healing)

My World
"We"

SCALE OF HUMAN EXPERIENCE – CREATIVE EXPRESSION & CHALLENGES

CREATIVITY

IDEATION / Thought
(Problem solving, poetry)

Complex Personal Challenges:
adoption, social anxiety...

REFLEXTION / Soma
(Dance, sports)
Beingness / non-thought

Complex Personal Challenges:
fibromyalgia, chronic illness...

SOCIAL INNOVATION

IMPLEMENTATION

"You / We"

External

INTERNAL

"I"

INITIATION

Personal

My Self
"I"

Perceptions
Awareness

Self vs Other
Non-Duality

Scale of Human Experience – Creative Expression & Challenges

The World
"Them"

My World
"We"

Their Self
"You"

No-Mind
Mindscape

Presentview

TRANSFORMATION / Society
(Social Labs, social enterprise)

Complex Social Challenges:
war, poverty, environmental...

RELATION / Self
(entrepreneurship,
Leadership, healing)
Social Innovations Example of Process

Social Lab

- Addresses complex challenges that are systemic, creative and participative, done in a systematic way
  - Multi-stakeholder, collaborative
  - Intensive, uncomfortable
  - Experimental interventions – prototyping
  - Seeks root causes behind problems
  - Tests solutions, aimed at key leverage points
SouthWest Yorkshire Social Lab brought together mental health practitioners and service users and ultimately to change the culture of the system and deliver better care.

Participants included doctors, psychiatrists, district nurses, district managers, caregivers, and people with mental health issues.
Social Innovations Example of Process

Mental Health Lab, UK, 8 Prototypes (Reos Partners, 2019)

1. New Service (ideas) Incubator: service improvement
2. No Decision about Me without Me: service users with influence over decision making
3. Thinking with Your Heart: working environment that staff put service users first
4. Integrated Health and Well-being Navigator Model: helps users through the system
5. Operation Demist: booklet of mental health services
6. Story Circles: sharing stories breaking down of “us” and “them”
7. Krafty Koffee: clubs empower people to set up peer support & self-help groups
8. Breaking Down Barriers to Well-being: museum of real-life experiences
References


References


References


References


References


References


Thank you.

Mike Unrau, PhD (c), University of British Columbia, Okanagan, msunrau@mail.ubc.ca