

# How do addiction paradigms influence our interventions ?

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Zukunftsfragen der Suchtforschung, Zürich, 9-10.9.2013

## Disclosure of interests, 2010–2013

- Research Funding: National Institute of Health and Welfare, Finnish Foundation for Alcohol Research, S. Juselius Foundation, Ministry of Social Affairs and Health, Finland
- Current employment: Professor, University of Helsinki
- Secondary occupations
  - Research Professor, National Institute for Health and Welfare (THL)
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  - Contral Clinics, corresponding doctor
- Other commitments
  - Paid expert lectures by H. Lundbeck A/S, MSD, Reckitt Benckiser Pharmaceuticals, and Schering-Plough
  - Nalmefene Advisory Board, H. Lundbeck A/S, Reckitt Benckiser Advisory Board
  - Paid editor of several addiction books, Duodecim Publisher Inc, Finland

# Addiction paradigms

- Addiction, world that is bound to (the Latin word *addicere*) excessive use of substance use
  - become addicted because of ignorance of risks
  - self caused disorder that can not / need not to be cured, pessimistic and stereotyped views about the prognosis of addicted patients
  - Current psychosocial and pharmacological treatments help many patients with alcohol dependence; however, 40% to 70% of these individuals relapse within 1 year <sup>1</sup>

<sup>1</sup>*Textbook of Substance Abuse Treatment, 4th edition, American Psychiatric Publishing, 2008*

## However, in 1986, O'Brien and McLellan <sup>2</sup> characterized addiction as a 'chronic, relapsing condition

- - they challenged the short term treatments that were routinely offered but frequently failed those with long term substance use problems
- - they argued that addiction was similar to diabetes or asthma in its duration and management, and that only offering short term detoxifications made relapse and the 'revolving door' of treatment a self fulfilling prophecy

<sup>2</sup>*O'Brien C, McLellan T. Myths about the treatment of addiction. Lancet 1986;347:237-40*

# Brain disease, overactivity or dysfunction of the brain reward system

- The reward system is part of a motivational system in our brain which guides us in our everyday lives, causing us to seek things that we need (or are necessary) while avoiding those which might be dangerous

## The reward pathway (RWP) in the brain

- any "pleasurable" action activates RWP
- endogenous opiates modulate the actions of RWP via dopaminergic system
- drugs can hijack the RWP and can drive the system



# Addiction (alcoholism) is a brain disease that can be cured<sup>3</sup>

- Drugs can activate brain reward circuitry<sup>4</sup> and alcoholism is a disease of the brain
- Pharmacological decoupling of alcohol consumption and opioidergic and dopaminergic activity may extinct the addictive behavior <sup>3</sup>

<sup>3</sup>*The cure for Alcoholism, Eskapa R, BenBella Books 2008*

<sup>4</sup>Gilman et al. J Neurosci 2008

## The recovery paradigm: A model of hope and change for drug addiction

- What is recovery ?
  - ‘Recovery’ can be defined in the mental health field as a process represented by Connectedness, Hope and optimism about the future, Identity, Meaning (quality) in life, and Empowerment

# How often do people achieve recovery<sup>6</sup>?

- Epidemiologic studies<sup>7</sup> show that, on average, 58% of individuals with chronic substance dependence achieve sustained recovery
- The adoption of recovery principles across Connecticut led to a 25% reduction in the annual cost of addiction treatment per patient<sup>8</sup>

<sup>6</sup>Warner R. *Does the scientific evidence support the recovery model? The Psychiatrist* 2010;34:3–5

<sup>7</sup>Sheedy CK, Whitter M. *Guiding principles and elements of recovery-oriented systems of care: What do we know from the research? HHS Publication No. (SMA) 09-4439. Rockville, MD: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, 2009*

<sup>8</sup>Kirk T. *Connecticut's journey to a state-wide recovery-oriented health-care system: Strategies, successes and challenges. In: Kelly J, White W, editors. Addiction recovery management: theory, research and practice. New York: Humana Springer, 2011*

## Key observations

- The most recent review of recovery rates suggests that approx, 60 % of people with a lifetime addiction eventually recover
- Recovery involves personal changes in both beliefs, skills and social capital
- Recovery is also a social movement where visible recovery champions can generate a social contagion of hope

# Key elements in guiding recovery interventions

- Medications (replacement/maintenance, abstinence or moderation) and recovery
- Integrated system models
- Determinants of harmful and risky use of substances
- Recovery supporting groups, mutual help
- What are the treatment outcomes ?
- What predicts recovery ?

