The Clinical Impact of the Brain Disease Model of Addiction: A Mixed-methods Study of AOD Treatment Providers’ Attitudes

Anthony Barnett – PhD Candidate

Today’s presentation

- Brief background of the brain disease model of addiction (BDMA)
- Study Aims and Method
- A summary of provisional results of interviews with treatment providers
- Conclusions and ideas for further research
Benefits and Criticisms of BDMA

Various Proposed Benefits of the BDMA (Leshner, 1997; Volkow, 2016)
- More effective treatments (e.g., pharmacotherapies), fewer side-effects
- Acceptance of addiction as a “real” disorder
- Reduce the stigma of addiction

Various Proposed Criticisms of the BDMA (Hall et al., 2015; Lewis, 2015)
- Ignores other factors involved in addiction (e.g., psychological, social, environmental)
- Focuses on medical interventions at the expense of public health considerations
- Reduces a person’s self-efficacy in recovery

Aims

Addiction Treatment Providers
A neglected voice within the BDMA debate!

PhD programme aims to explore:

1. Treatment providers’ attitudes towards the BDMA and its impact on clinical practice and client behaviour;
2. Treatment providers’ views on how the brain and neuroscience are relevant to clinical treatment
Method – Qualitative Phase

Method:
- Semi-structured interviews (45 mins to 1 hour)

Participants:
- 18 interviews with various treatment providers
  - Addiction psychiatrists (3) and addiction medicine physician (1)
  - Nurses (4)
  - Social workers (4)
  - Psychologists/Counsellors (3)
  - Case workers (3)
- 4 sites within the Victorian public AOD sector
  - Inner and outer Melbourne metropolitan multi-disciplinary treatment clinics
  - A rural therapeutic community

Analysis:
- Thematic Analysis (Braun & Clarke, 2006)

Results – Views about causes of addiction

- AOD addiction viewed as a multi-faceted, complex bio-psycho-social-systems phenomena involving a combination of:
  - Individual factors (e.g., genetic predisposition, personality)
  - Social factors (e.g., family context, friendship networks)
  - Economic context (e.g., SES and access to work)
  - Cultural factors (e.g., societal norms shifting over time)

James (Addiction Physician, Outer Metro Clinic):

“Addiction is a phenomenon involving cultural factors, drug markets, economic contexts...It can be a glancing blow or it can be a lifetime career depending on genetic vulnerability, social vulnerability, family context.”
Results – Views about treatment

- Treatment ‘philosophies’ vary between organisations and treatment providers
- Different aspects of brain disease models of addiction inform practice in different ways

Case Study 1 – The Outer Metro Clinic linked to hospital
- Pharmacotherapy focus (opioid replacement therapy) / NSP
- Harm reduction model
- Key language: “Patient with a substance use disorder” (avoiding ‘addict’/‘addiction’)

James (Addiction Physician, Outer Metro Clinic):

“I try to offer people a medical intervention if one is available. At the same time recognising that that’s a really small part of an effective intervention. Most people use drugs and come to hospital as a consequence because of what’s going on in the society around them, their community around them.”

Results – Views about treatment

Case Study 2 – Regional Therapeutic Community
- Based on social identity model of recovery (see. Best)
- Requires clients to accept the “addict” identity and through living a ‘better life’ and changing social networks, supplanting the addict identity with a ‘non-using’ one
- Abstinence focus
- Incorporates 12-step ‘psycho-spiritual disease’ model within practice
- Key language: “I am an addict……”

Sandra (Case Worker, TC, in recovery 10 years):

“We’re a role model, in a way, of a direct link to them normalising their behaviours and their social skills. We do that through role modelling and through therapeutic interventions with them...if you’re an alcoholic or your life’s led you into the chaos into what’s led you into here, the probability of you going out and being able to use a substance again is zero...we don’t handle them gently...I’ve got no qualms in saying that to them. No qualms in saying, I've lost <family members myself> to addiction...”
Results – Avoidance of the word ‘disease’ in practice

- So we see two very different treatment models (e.g., medical vs. therapeutic community)
- However, across both sites, discussing addiction in terms of a ‘brain disease’ or ‘disease’ is often overtly avoided

**James (Addiction Physician, Outer Metro Clinic):**

“‘Disease’ implies, I don’t know it implies contagion. It implies decay, it implies damage in a way that is really stigmatising.”

**Chris (Social Worker, Therapeutic Community):**

“I avoid the word... It makes me squirm when I hear the word ‘disease.’”

Results – **Negative clinical impact** of BDMA for clients

1. Increased sense of ‘powerlessness’/fatalism undermining recovery

**James (Addiction Physician, Outer Metro Clinic):**

“‘If people perceive their drug use as a ‘disease’, they can be rendered powerless – “I am broken therefore I might as well continue to drink’”

2. Increased stigma

**Chris (Social Worker, Therapeutic Community):**

“Discussing addiction in terms of a disease - it implies damage in a way that is really stigmatising. ‘My brain is damaged; I am damaged goods.’”
Results – Discussing neuroscience within practice

For some clinicians – Yes - part of their role and relevant to clients

Tom (Addiction Psychiatrist, Inner City Service)

“I’m a doctor, of course I discuss the brain. I use analogies all the time when I’ve got someone who is sitting in front of me, who is on methadone and is still using heroin, we discuss what their receptors are doing...it’s all very neurobiological the discussion”

For others – No – not qualified to discuss the brain and irrelevant to clients

Sandra (Case Worker, TC, in recovery 10 years):

“I’m not qualified to discuss anything like that… I don’t think they would gravitate to that type of speak to be perfectly honest...I’ve seen sometimes someone start speaking about all your neuron transmitters and this and that happening in your brain and they’re all just like, ‘what the hell?’”

Conclusions and further research

1. Clinicians view addiction as being caused by individual, social and societal factors
   - How many of these factors can treatment address?
   - How can this be overcome? (e.g., housing services, public health interventions)

2. There are a range of (sometimes conflicting) treatment models that adopt various aspects of disease models of addiction
   - Biomedical versus psycho-spiritual (12-step like) disease models
   - What does this look like from a client perspective?
   - How do we understand “evidence based practice” within this context?

3. The term ‘disease’ used in discussion with clients about their ‘addiction’ appears to be in the main avoided for its negative connotations (e.g., increased sense of fatalism)
   - There appears to be a disjuncture between policy and practice
   - Further empirical research required exploring effect of ‘disease’

4. Discussions of the brain and neuroscientific concepts with clients are limited and vary between practitioners
   - Implications for the translation of neuroscience
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