

Addiction 2008 – where does AA fit in the road to recovery?

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I must warn you that despite what I present tonight

• Nothing is permanent but change

Heracitus – Greek Philosopher 500 BC

Alcohol

- Enhances the enjoyment of life for many individuals who are able to drink in a non-harmful manner

BUT

- For some who cannot, it can be a life sentence and a source of physical, social and emotional problems

Drug use - Australia

- 35% of Australians drink at "risky levels for short term harm", 10% at "risky levels for long term harm"
- 6% of Australians have alcohol dependence
- Alcohol is responsible for
 - 10 premature deaths per day
 - 1/3 of fatal road crashes
- Illicit drug use is responsible for
 - 1 premature death per day
 - Young people (20-29yrs) use in last 12 months
 - 13% cannabis, 10% amphetamines

Statistics on drug use in Australia 2006 AIHW April 2007

Global Burden of disease

- Mortality
 - Tobacco 8.8%
 - Alcohol 3.2 %
 - Illicit drugs 0.4%
- Disability (DALYs)
 - Tobacco 8.0
 - Alcohol 2.0
 - Illicit drugs 2.0

Statistics on drug use in Australia 2006, AIHW April 2007

"Double Trouble" - mental illness & drug/alcohol use disorders

- Alcohol dependence
 - 20% have an anxiety disorder
 - 24% have a mood disorder (depression)
- Substance use disorders
 - Psychotic disorders risk increase x4
 - Bipolar disorders risk increase x 5
- Approx half of those with psychotic/bipolar disorders have substance abuse or dependence problems

Regier 1990, Kessler 1994

Alcohol related health problems are multi-dimensional – physical, mental, social, legal etc.

1. Dependence (addiction)

However, for every alcohol dependent individual there are four with other alcohol related health problems

2. The acute complications of drug use – intoxication, trauma, violence, drowning, infection – **These cause more harm than**
3. Chronic complications – organ damage eg liver disease, brain disease etc

World Health Organisation 2004. Neuroscience of psychoactive substance use and dependence

Terminology – my opinion

- The terms addiction, addict and alcoholic have stigma attached to them.
- Although I will use these terms in this talk
 - I prefer to see a person as “an individual living with addiction” and
 - I prefer such individuals to see themselves as “in recovery” rather than “I am an alcoholic”
 - Addiction and dependence will be used interchangeably

What do we know about addiction to alcohol?

- It is a chronic relapsing brain disease
- Some brain changes that occur with alcohol addiction are reversible, some permanent
- Some folk are at greater risk of becoming addicted than others.
- Individual susceptibility, availability, reasons for continuing use and environmental influences are critical to the development of alcohol addiction
- Treatment works, is cost effective and requires the addict to change behaviour.

WHO 2004

Addiction is

A chronic relapsing brain disease that is manifested by

A behaviour – compulsive drug/alcohol seeking and

Seen in a social context

Although initiation of use involves choice, once addiction is established the likelihood of relapse is no different from asthma, diabetes and arthritis

Leshner A.I. Science (1997) 278: 45-47

Addiction is a complex disorder that affects the brain processes involved in

- Motivation
- Decision Making
- Pleasure seeking
- Inhibitory control
- The way we learn and consolidate information and experiences.

WHO 2004 Neuroscience of psychoactive substance use and dependence

How does the brain work?

- Sophisticated messages, emotional feelings, writing poetry, understanding concepts are sent from one part of the brain to another using **neurotransmitters**.
- **Neurotransmitters** (like mail) need **receptors** (a mailbox) in order to receive a message (to read your mail) eg endorphins the naturally occurring pain relieving chemicals released in the brain need to attach to an endorphin receptor before pain relief can occur.
- Genes must be expressed (and thus promote new pathways in the brain) for the brain to remember what happened

Who 2004

Addiction is a brain disease

Repeated use of a drug (alcohol) in increasing amounts results in:-

- Changes in receptors in the **reward area** of the brain (that act like a car's accelerator). These result in **euphoria** (a high), **tolerance**, a **memory of the drug** and **hypersensitivity** to that drug expressed as "a need"
- Metabolic changes in part of the brain that is the **inhibitory centre** (that act like a car's brake) occur that result in **impaired control**
- Changes in gene expression
- **Increased responsiveness** to environmental cues

WHO 2004

The brain of the addict becomes different from non addict's brains

Are any of these changes in an addicted person reversible?

1. The **receptor change** that results in tolerance. **Physical tolerance** for most drugs is gone in a week after stopping use.
2. The **metabolic change** in the frontal lobe that results in impaired control (after stopping this takes about 3 months to improve and function to return)
3. The **damage to nerve sheaths** that results in problems with short term memory and learning new skills (this starts to improve soon after stopping but takes up to 2 years for maximum recovery)

Fadda and Rossetti 1998

Are any of these changes not reversible in the addicted person?

Even when an individual stops drinking or using **some things are not reversible** eg.,

- The change in the specific receptors that results in **hypersensitivity to alcohol**. This is permanent and is the reason why there is a lifelong risk of relapse.
- The death of sufficient brain cells to cause brain shrinkage that results in dementia (Korsakoff's syndrome)

WHO 2004

What motivates people to change and thus to seek help?

- Potential "crises/consequences"
 - Social – threat to job, home, marriage, legal (DUI)
 - Psychological – mood disorders eg., depression
 - Physical – deterioration in health, trauma
- **Ambiguity and conflict are common in individuals who are struggling with the decision to change.**

Prochaska and Diclemente 1982 (stages of change)

Principles of "best practice" treatment of alcohol dependence

"THE FIRST QUARTER PERFORMANCE IS CRITICAL"

- A clinician who acts as a guide needs to explain what can and cannot be done – he needs to set boundaries and agree upon areas of responsibility
- He should use a holistic approach. This involves:-
 - Empathy with non judgmental support for the addict
 - Treat addiction as an illness not a moral weakness
 - Attend to/assist with physical health, psychological, legal, and work issues as well as accommodation
 - Set agreed realistic goals with the individual
 - Encourage the addicted person to take responsibility

This understanding resulting from my experience as a rugby player, team captain and coach.

Medical treatment for alcohol dependence- the addicts perspective

- Stop drinking.
 - Allowing healing of damaged organs to commence, this is especially important for repair of the brain.
- Seek treatment for withdrawal
 - by reducing the severity of withdrawal symptoms the brain is protected from ongoing damage and reduced risk of relapse,
- Learn relapse prevention skills
- Accept the need to
 - Stay alive and establish order into one's life
 - pay off debts - economic, social and psychological
 - learn skills and take responsibility

Features of effective programs

- **Strength of the therapeutic alliance** between clinician and patient. This is the most powerful asset to engage a patient in treatment
- Length of time in treatment
- Inclusion of relapse prevention in program
- Careful monitoring of progress by
 - The clinician
 - The addicted person
 - *The social support team

*This is where family, friends and AA can play an important role

Frieswyk S.H. 1986, Krupnick J.L. 1996

The value of social support

Socially connected individuals - whether in an extended family or group membership -

- *are 2- 3 times less likely to die over the next 10 years
- **Live twice as long with established treated cancer or heart disease
- **once in treatment have fewer episodes of relapse of drug/alcohol use

* Primary prevention ** Secondary/relapse prevention

Self Help groups – AA

- Social support groups are most attractive to those who have alienated family and friends and thus cannot rely on them initially for support
 - Members can assist one another by working together to maintain abstinence
- Research although limited suggests that -participation in these groups predicts more positive long term outcomes for many
- I consider that these groups are a very useful **adjunct** to a comprehensive treatment program.

Cause and effect – Lessons from history of the human race

The following beliefs were once thought to be facts:-

- Storms are a result of the “gods being angry”
- I am rewarded with good fortune, because I am a good person
- I am being punished with misfortune, so I must be a bad person
- The earth is the centre of the universe
- Drinking coffee speeds up sobriety from alcohol intoxication

Does AA work – how do we judge?

To study the influence of AA on outcome and to determine cause and effect, the “highest level” of scientific evidence needed should come from a RCT

- Randomised to reduce the bias that occurs if good risk people are not evenly allocated to AA or not
- Comparison of outcomes in two groups one who would attend AA and one not
- Trial – testing the outcome in one against the other

I am aware of one study in which 12 step facilitation as part of a comprehensive treatment program produced better outcomes than “standard treatment”.

George Vaillant's long term follow up studies supports this.

AA has never been tested as the only intervention in a RCT

Why do I like AA?

I see AA as a self help social support movement

- AA has a spiritual philosophy
- AA fellowship offers unconditional support from those “who have been there” and who have not been damaged by those seeking support.
- AA has survived the test of time. Society tends to discard things that are not useful or can be replaced – slide rule, cut throat razor, button up boots.
- Active support in AA results in better outcomes

Getting support for a person with an addiction is often difficult when you have “burned your bridges” especially with your family by your damaging actions.

At times the family is part of the problem

What concerns do I have about AA?

Many members

- Still see themselves labeled as ill/disabled rather than “being in recovery”
- Don’t take personal responsibility for their recovery
- Develop a “transfer addiction” to AA
- Believe that if they attend “90 meetings in 90 days” they are cured
- Believe “it must be done the way I did it”
- Blame their parents – “I inherited this addiction”
- Do not consider tobacco as a drug even though it is addictive and causes the death of 1 in 2 smokers.

Treatment – what are our expectations?

- Treatment can only make a **time-limited contribution** to the lives of those who receive it.
- As with other chronic relapsing disorders
 - The therapist acts as a guide/coach
 - The individual needs “to kick goals”
 - to undergo a lifestyle (behaviour) change and
 - be actively involved in his/her own treatment

What should we expect from treatment?

- There are no program or treatment settings that have been shown to be superior to all others. **There are many pathways to the same goal (recovery)**
- Desirable outcomes.
 - Life long abstinence
 - Improved physical health
 - Improved mental health
 - Reduced risk to others – violence, family breakup

Recovery is a state of

- WELLNESS both mental and physical
- HOPE for the future
- RESILIENCE to deal with what life has to offer/deliver
- SELF DIRECTED CARE – by regaining control over one’s life, health and direction

This requires constant life long vigilance since control over alcohol or drug use is never regained.

Resilience- is an area we need to explore further

- A resilient person is one who bounces back from difficulties
- While realistically recognising one’s limitations, such a person displays
 - Persistence (rather than giving up)
 - Optimism (rather than pessimism)
 - Redemption – wisdom and a compassionate character through the experience of suffering

What are some of the critical things that need to be done?

- Neuroscience is just beginning to increase our understanding of addiction and hope for better treatments. – **more research needed.**
- Change society's attitude to addiction
 - Remove stigma, treat as a chronic relapsing disease like asthma, diabetes, arthritis
- Improve
 - The training of clinicians- medical, psychologists, social workers and welfare workers
 - Facilities for treatment
 - The individual's capacity to be self-directive

Recommended reading

Volpicelli J. ,Szalawitz M. "Recovery options"
John Wiley and sons 2000

This is a very readable, helpful guide for individuals living with addiction and their families

Neuroscience of psychoactive substance use and dependence. World Health Organisation
Geneva 2004

This monograph is written for individuals with some knowledge of the field eg., scientists but should be of interest to health care workers with a science/biology background.