

Research Round-up

A quick glance around the recent research articles and resources that we have found interesting.

Alcohol and tobacco are used as coping mechanisms, while cannabis is used for pleasure.

People with depression are more likely to turn to alcohol to cope with their problems whereas people with psychosis are more likely to use tobacco to cope, according to a new study from the University of Newcastle and the University of New South Wales. Cannabis users are more likely to use the drug for pleasure rather than to cope.

Around half of all people with a mental illness also have a substance use disorder. The authors pooled data from five studies, involving nearly 1,000 people with co-morbid mental illness and substance use issues, to determine what substances were used and why, classified by mental disorder.

The study to be published in the April issue of Addictive Behaviors is the first of its kind to investigate reasons for substance use among people with different types of mental illness across a range of substances – alcohol, tobacco and cannabis. The findings suggest that it is important to tailor treatment and interventions for people with co-morbid mental illness, by substance type and type of mental disorder, say the authors.

"The perceived ability of tobacco to assist people with mental disorders, to cope may itself be a significant barrier to smoking cessation among this population.

It may be imperative to the success of smoking cessation interventions, especially among people with psychotic disorders, to address alternative coping strategies and to adequately address the person's nicotine addiction," write the authors.

Alcohol and depression may warrant different strategies. *"This study suggests the perceived capacity of alcohol to help people cope, to escape reality, or block everything out, may be a strong deterrent to stopping drinking, especially among women and people with depression,"* say the authors.

Cannabis users with mental illness may benefit from addressing alternative ways they can derive pleasure from their lives, the study concludes.

Thornton L; Baker A; Lewin T; Kay-Lambkin F; Kavanagh D; Richmond R and Kelly B; Johnson . (2012) Reasons for substance use among people with mental disorders. Addictive Behaviors, 37, 427-434.

Dr Ben Teoh
writes:

The relationship between substance misuse and mental disorders is complex and requires comprehensive assessment.

It is important to determine the primary diagnosis and the reasons for the abuse of substance.

Specific treatment strategies must be tailored for the individual client/patient.



Persistent attendance at 12-step meetings improves outcomes for young people in drug and alcohol treatment.

Adolescents who continued to attend 12-step programs in the seven years following treatment for drug and alcohol disorders had significantly better long-term outcomes than those who discontinued treatment.

Young people who had high levels of attendance at 12-step programs in the first year after treatment and subsequently discontinued had no better outcomes than those who did not attend programs in the first place or who had very low attendance. Fewer than 15 per cent of the adolescents studied continued to attend 12-step meetings over the seven years of the study.

The study, published online in the international journal *Addiction*, followed near 400 adolescents over seven years who had attended private treatment programs of Kaiser Permanente Northern California. It is one of the first to investigate 12-step outcomes for adolescents, as opposed to adults.

"Findings of the current study suggest that it is important to have not only early but also persistent attendance over time," say the authors, from Kaiser Permanente and the Department of Psychiatry at the University of California.

The findings are internationally relevant because attendance at 12-step meetings among young people (aged 13 to 18) is increasing worldwide, but there have been few studies on this age group.

"Findings of this study underline the importance of continuing care (formal substance use treatment or 12-step groups or both) for long-term recovery of substance use disorders, as they are chronic and relapsing conditions better managed by ongoing monitoring and extended services than by an acute treatment approach," write the authors.

Chi F; Campbell C; Sterling S and Weisner C. (2012). Twelve-Step attendance trajectories over 7 years among adolescents entering substance use treatment in an integrated health plan. *Addiction* (early online view).

Dr Ben Teoh writes:

Long term management of drug and alcohol disorders requires ongoing treatment, research and the process of recovery.

12-Step meetings have been proven to be effective and a better outcome. Acute treatment includes detoxification at the start of a long term treatment program for drug and alcohol disorder.

SPP is a 12-step based psychological and medical treatment program for addiction disorders.

Dutch study finds smoking is associated with more severe anxiety and depression symptoms and slower rates of Recovery.

In a recent edition of *Pacific Views*, we reported on the success of SPP's smoke-free policy. A Dutch study which is in press for the International journal, *Drug and Alcohol Dependence*, has confirmed our observations that improvement in depressive and anxiety symptoms are slower in nicotine dependent smokers than in non-smokers (including former smokers).

The authors from Leiden University in the Netherlands analysed the severity of psychiatric symptoms in 1,725 patients across four smoking categories – never smoked, former smokers, dependent and once dependent smokers. The symptoms of depression and general anxiety were more severe in the nicotine dependent patients than in any of the three other groups and after 2 years, Recovery was slower in nicotine dependent patients even after controlling other factors.

The authors suggest that rather than medicating symptoms of psychiatric illness, *"chronic and heavy nicotine use does not help alleviate negative affects and may even be counterproductive"*.

They recommend that health messages are targeted at smokers who may erroneously believe that smoking helps them regulate their moods. They also recommend *"nicotine-dependent patients may be prioritised for smoking cessations programs"*.

The authors note that this is the first study to investigate the link between nicotine dependence and mental illness among psychiatric patients – most other studies have used general population samples.

Jamal, M., et al., Association of smoking and nicotine dependence with severity and course of symptoms in patients with depressive or anxiety disorder. *Drug and Alcohol Dependence* (2012), <http://dx.doi.org/10.1016/j.drugaldep.2012.05.001> (in press).

Dr Ben Teoh writes:

This is another study reporting the negative consequences of smoking. The mental effect of nicotine dependency has been neglected.

Like other mood altering substances, nicotine has a direct effect on brain receptors, causing significant emotional changes, which may not be obvious initially.

The distressing mental effect of nicotine withdrawal is well recognised, but this study reports the direct effect of nicotine on anxiety and depressive symptoms.

It is important to inform patients that smoking may not help their mood, even though they may experience a temporary calming effect.

Family-based treatment may curb rising rates of alcoholism among young women.

Rising rates of alcohol problems in young females, is associated with high rates of childhood depression among girls and may be explained by dysfunctional family and social interactions, according to findings from a population based study of more than 4,000 British children.

Girls and young women with alcohol problems were more likely to have had childhood depression than boys, according to the study, published in *Addiction*. The high rates of alcohol use in these girls was highly likely to be attributable to dysfunctional family interactions whereas with boys heavy drinking was more likely to be influenced by their peers and by anti-social behaviour than by childhood depression. Childhood depression was more common in boys than girls but was only associated with increased alcohol problems in girls.

The authors suggest that early intervention for female children with depression and addressing family issues may be highly effective in reducing the growing rates of alcohol problems among female adolescents and young women.

"These findings contribute to a growing theoretical basis suggesting that family related interventions to reduce alcohol use are particularly effective for girls."

The authors from the University of Cardiff and the University of Bristol in the UK suggest that a different approach may be useful in addressing alcohol problems in boys.

Saraceno L; Heron J; Munafo M; Craddock N and van den Bree M (2012). The relationship between childhood depressive symptoms and problem alcohol use in early adolescence findings from a large longitudinal population based study. *Addiction*, 107, 567-577.

Dr Ben Teoh
writes:

We have noticed a significant increase in the rates of alcohol problems in young females.

Significant evidence has shown that family intervention is effective and critical in the treatment of addiction disorder. SPP provides regular family programs for clients/patients, and we have received positive feedback from clients/patients and family members regarding the program.

12-Step Meeting participation cuts healthcare costs for adolescents by 4.7%

Adolescents, who attend 12-Step Meetings following treatment for alcohol and other drug dependence, not only have improved clinical outcomes but also reduce their healthcare costs by 4.7% each year.

The study of 400 American adolescents who attended 12-Step Programs following inpatient treatment for alcohol and other drug dependence, in four Kaiser Permanente Private Treatment Centres in Northern California, found that their healthcare costs were cut by 4.7% for each meeting attended.

The study, which has been published online in the international journal, *Drug and Alcohol Dependence*, followed the cohort for a period of 7 years following initial inpatient treatment for drug and alcohol dependence. The reduced costs were largely due to lower hospital inpatient days, fewer emergency department attendances, fewer primary care and psychiatric visits and lower AOD treatment and other medical costs.

At the start of the study, when patients were admitted for inpatient AOD treatment, those who attended 12-Step Meetings had more severe AOD use and higher medical costs than those who did not attend 12-Step Meetings.

The authors suggest that the reduced costs, in association with 12-Step Meetings participation, may be related to improved AOD outcomes leading to reduced demand for treatment and also being positively influenced by new social networks replacing the former AOD networks, encouraging better health behaviour and more timely access to treatment.

A separate study of the same cohort, which we reported on in the last Issue of *Pacific Views*, showed that adolescents who continued to attend 12-Step Programs in the 7 years following treatment had significantly better longterm outcomes than those who discontinued treatment. Those who had high attendance in the first year after treatment and subsequently stopped attending meetings did not have better outcomes than those who did not attend in the first place.

Mundt, M.P., et al., 12-Step participation reduces medical use costs among adolescents with a history of alcohol and other drug treatment. *Drug Alcohol Dependence* (2012), <http://dx.doi.org/10.1016/j.drugalcdep.2012.05.002> (in press).

Dr Ben Teoh
writes:

This is a significant and robust study on the efficacy of 12-Step Meetings.

Although it is focused on adolescents, our experience suggests that patients with addiction from all age groups can benefit from 12-Step Meetings.

Many patients with addiction have informed us that 12-Step Meetings have helped them enormously, with some declaring that it has saved their life.

We highly recommend that all our patients with addiction attend 12-Step Meetings.

Smokers who value the future are more likely to quit

Intuitively it makes sense that people who are able to look to the future are more likely to make healthy lifestyle changes including successfully quitting addictive substances such as cigarettes.

A new study analysing data over eight years from the Household Income and Labour Dynamics of Australia (HILDA) survey, which collects data on the economic and subjective wellbeing of 7,000 Australian households, has found that people who are more future oriented in their savings plans are more likely to successfully quit smoking.

Researchers in other fields have found similar associations: diabetics who are future focussed are more likely to make healthy changes to their lifestyle; cocaine users who discount the future are less likely to quit.

The authors suggest that interventions which encourage people to think about the future – such as weighing up the costs and benefits of making healthy lifestyle changes – may help people to successfully quit smoking and other addictions.

Brown H, Adams J, 2012, The role of time preference in smoking cessation: a longitudinal analysis of data from the Household Income and Labour Dynamics of Australia survey, 2001–08 *Addiction*.



1,817 survey participants were smokers at the start of the survey. Of those who had successfully quit by 2008, 76 per cent were long term planners – that is they planned ahead in their savings by more than three months. Only 66 per cent of those who continued to smoke were long term planners.

Dr Ben Teoh writes:

Addiction is associated with compulsion and the inability to consider the consequences of the addictive behaviour. There are multiple reasons for such behaviour ranging from psychosocial factors to biological predisposition.

This study looks at a simple intervention that may be helpful.

Reminding the clients of the positive future may motivate them to engage in treatment and defer their compulsive behaviour.

More accurate clinical diagnosis of depression subtypes will improve treatment options

Researchers have developed a scale which they say makes it easier for psychiatrists to distinguish clinical symptoms of melancholic and non-melancholic depression (also known as endogenous and reactive depression).

Professor Gordon Parker and colleagues from the Black Dog Institute at the University of New South Wales have developed a measure called the Sydney Melancholia Prototype Index (SMPI) that includes features thought to be exclusive to melancholic or non-melancholic depression. More than 270 patients with depression severe enough to require treatment at the Black Dog Institute Depression Clinic were recruited to fill out the SMPI and a depression severity measure. Their assessing clinician filled out the clinician's version of the SMPI, following interview.

The researchers found that the SMPI provided a greater level of discrimination than the depression severity measure. Non-melancholic patients had more anxiety disorders, more life stressors and a personality style that would predispose them to non-melancholic depression, such as a higher level of self criticism and perfectionism. Clinician's rating of a patient's current mood was more accurate than patient's self rating. The authors say that the scale now needs testing and further refining in a community setting.

Parker G, McCraw S, Blanch B, Hadzi-Pavlovic D, Synnott H & Rees, A-M 2012, Discriminating melancholic and non-melancholic depression by prototypic clinical features, *Journal of Affective Disorders*.

Dr Ben Teoh writes:

This is an important addition to the literature because while it is known that there are differences in causes and responses to treatment for melancholic and non-melancholic depression it has been more difficult to pin down the precise symptoms.

Major depression, as defined in DSM IV, is a heterogenous condition, that covers a range of conditions from someone reacting to stress to a biological condition with brain dysfunction. At this stage, researchers have not been able to find a biological marker that can help a clinician to confidently treat a subtype of depression with pharmacological and physical treatment. Consequently, there has been much debate about what is the effective treatment for major depression.

Melancholic or endogenous depression is much rarer than reactive depression and affects only 10 per cent of the population compared with 90 per cent of the population who have the more common non-melancholic or reactive depression. The psychiatric community is divided on the need to distinguish between the two types and in fact melancholia does not exist as a diagnosis in the current DSM IV. Giving clinicians tools for more accurate diagnosis will improve our ability to prescribe more tailored effective treatments.

Factors effecting risk of relapse in patients attending private alcohol and drug treatment centres

The authors examined the records of 684 adults in remission – abstainers and non-problem users – one year after treatment. They found that relapse was most likely at 5 years than at an 11 year follow-up, and that non-problem users had twice the odds of relapse compared to abstainers. Younger people and those who attended fewer 12-step meetings were at higher risk of relapse.

The authors conclude that non-problem use as opposed to abstinence is not an optimal outcome at one year after entering treatment for substance use. They also suggest that with people choosing non problem use over abstinence, it is very

difficult for clinicians to predict in advance who will successfully maintain non problem use and who will relapse.

Consequently they recommend that abstinence is preferable as it allows patients to choose something which may be attainable over the longer term.

Mertens J et al 2012, Ten-year stability of remission in private alcohol and drug outpatient treatment: non-problem users versus abstainers, Drug and Alcohol Dependence.

Dr Ben Teoh writes:

This study confirms that achieving complete abstinence should be the goal in recovery for addiction, for most clients.

Recovery in addiction is a long term process, and non problem users are exposed to multiple triggers and cues that make them vulnerable to relapse.

Continuing use of the substance of addiction may also have a chemical effect on the brain (dopamine system) that would make it difficult for the client to resist using.

At SPP, we recommend complete abstinence for most of our clients.

 **Of the four out of five Australians being treated for drug and alcohol problems who were exposed to trauma; nearly half have current PTSD symptoms**

Around 80% of patients being treated for drug and alcohol disorders in Sydney Detox Units have experienced at least one trauma and most have experienced several traumas. Around 45% of the patients screened positive for current PTSD symptoms.

The study of 253 inpatients, led by Dr Glenys Dore, Head of the Northern Sydney Drug and Alcohol Service, and published in the May 2012 issue of *Drug and Alcohol Review*, is the first large scale review in Australia of the prevalence of trauma exposure and PTSD among patients being treated for substance use disorders.

Women were nine times more likely to be raped and five times more likely to be sexually molested than men. Interestingly, there was no significant difference between men and women in the overall rate of trauma exposure.

Three quarters of the study sample had been treated in the past and the authors suggest that relapse is likely to occur without integrated treatment for comorbidities including PTSD.

The authors discuss the many theories proposed to explain the high rates of PTSD among individuals with drug and alcohol disorders:

- Self medication to alleviate symptoms such as insomnia, intrusive thoughts and hyper-vigilance.
- High risk lifestyle (particularly associated with heroin and methamphetamine use) which exposes users to traumatic events.
- Common factors: individuals with pre-existing psychiatric illness may be more at risk for substance use disorders and also for developing PTSD if exposed to trauma.

The authors conclude that the relationship between substance use disorders and PTSD is complex *"with both disorders serving to maintain and exacerbate the other"*.

The authors note that very few treatment services for substance use disorders also provide specific treatments for PTSD and that "integrated treatment for both disorders may lead to improved treatment outcomes".

Dore, G, Mills, K, Murray, RM, Teesson, M & Farrugia, P, 2012, 'Post-traumatic stress disorder, depression and suicidality in inpatients with substance use disorders', *Drug and Alcohol Review*, vol. 31, no. 3, pp. 294 – 302.

Dr Ben Teoh writes:

This is a very significant Australian Study confirming experiences both abroad and at SPP.

At SPP, we have observed the relationship between trauma and addiction for nearly two decades.

Our own survey of inpatients over the years indicates that 70-80% of clients who presented with addiction had a history of trauma (consistent with this study by Dore et al).

Therefore, it is critical that all patients with addiction be assessed for a history of trauma, and that an integrated service be available to provide concurrent treatment of both of these conditions.