Addiction Treatment Research NEWS

NEWSLETTER OF THE ADDICTION TREATMENT RESEARCH INTEREST GROUP

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EDITORIAL

As we reach the end of another month it is encouraging to think that we have survived another winter and that spring has arrived. It is also encouraging to think about the high levels of productivity within the addiction treatment field.

Without fail as I talk to colleagues I never cease to be amazed by the commitment of workers in this field. This commitment is reflected in this edition of the ATRN and is exemplified in particular by the dedication of our regular contributors Sean Sullivan (ABACUS) and Simon Adamson (NAC and ATRIG Chair), who both continue to provide thought provoking comment and updates on what is happening in the addiction treatment field. In this issue Sean discusses potential ways forward for improving treatment for problem gambling in New Zealand. In particular, Sean highlights the need to broaden treatment services both in terms of extending the focus of existing services and widening treatment models to include early intervention by other health and social services.

Simon's research update from the NAC also illustrates the field's commitment to improving treatment for people with co-existing mental health and AOD disorders. In his overview of the TEAM study, Simon highlights a range of issues facing many clients who present to treatment with co-existing alcohol dependence and a major depressive disorder and the current dilemma in best treatment practice for such people. We look forward to hearing more in the future about the findings of this important study and the implications these might have for clinical practice.

A reflection of the field's commitment to improving AOD screening and outcome measurement for youth is illustrated in the first of our three feature articles. Grant Christie briefly describes the development and structure of the Substances and Choices Scale (SACS) a new AOD screening and outcome measurement tool that has been developed by Grant and his team for use with youth.

A commitment to client-centred treatment and the essential value of consumer feedback is evident in the second feature article by Sheridan Pooley. As the CADS Auckland Regional Consumer Advisor, Sheridan provides an overview of consumer feedback on the treatment services provided by CADS Auckland in her article 'ConsumerSpeak'. This article reiterates the great depth of learning about ways to improve treatment services that can occur when consumers are consulted and highlights the necessity to ensure that consumer feedback is actively incorporated into every treatment service.

The final feature article in this edition is written by Lara Aitchison a PhD student at the University of Canterbury who is also currently working for ADANZ. Lara's article outlining her research using animal models to examine the effects of BZP in adolescent rats on adult behaviour highlights the field's commitment to better understanding the impact of substance use on longer term development and behaviour.

The commitment by an active group of researchers to investigating a broad range of topics in the AOD field is evident in Janie Sheridan's update on the research activities of staff at the University of Auckland's Addiction Research Network (ARN). This overview of the team's research interests and activities highlights the high degree of quality and variety of research being conducted within the New Zealand addiction treatment research field.

Finally, a commitment to broadening our reading and conceptualisation of treatment models is highlighted by David Mellor as he shares what 'he's been reading' on Acceptance and Commitment Therapy (ACT) and its applicability for use in AOD treatment. This interesting article provides a brief overview of ACT while also challenging our thinking around dogmatic adherence to DSM criteria for understanding addiction and other mental health issues.

Many thanks to all who have contributed to this edition. I hope that many new ideas are sparked, confirmed and discussed as you read this latest issue. Look forward to seeing you all at the combined Cutting Edge and APSAD conference in November.

Happy Reading.

Ria Schroder
Editor, August 2007

Despite gambling being an established pastime for thousands of years, and presumably a proportion suffering serious consequences because of their gambling during this time, treatment has only very recently become available through publicly funded health specialists. Throughout the world, there is no accepted treatment approach that could be regarded as a 'gold standard' approach. In the past, and currently in some environments overseas, the focus has been upon the gambler reaching 'rock bottom' and then services being available for them to access help specifically focussed upon their gambling.

A New Zealand approach

In an attempt to provide a standardised model for problem gambling treatment, the Ministry of Health is reviewing treatment approaches currently used nationally and internationally for problem gambling and allied conditions. The Ministry's mental health addiction action plan, Te Kokiri, has indicated a shift in focus from addressing the 3% most severely affected, to earlier intervention through access to primary healthcare, integrated mental health and addiction systems, and a culture of recovery based upon 'a robust evidence base'. Evidence indicates that mental health and addictions commonly overlap, suggesting the need for a broader focus of treatment for these issues, and this applies for problem gambling as well.

Research available on the best approach to treatment of problem gambling is largely focussed upon advanced gambling problems, and is relatively sparse. Te Kokiri calls for a 5-year research programme addressing four problem gambling issues:

- Outcomes
- Effective public health interventions
- Barriers to help-seeking
- Effectiveness of treatment approaches

A workforce baseline

In New Zealand, although problem gambling research remains significantly below that of other addictions, we are fortunate to have recent information about the specialist problem gambling workforce: its profile, ability to provide assistance to problem gamblers and their families for issues that may be wider than gambling impacts, and if necessary, its motivation to adjust its treatment approach.

Abacus Counselling Training & Supervision Ltd, as part of its role in developing the existing specialist problem gambling workforce, has conducted an interview and assessment of a substantial proportion of the workforce. This followed previous research by Abacus that identified that there was strong support by clients, treatment organisations and their practitioners, for also addressing issues outside of gambling behaviour. These non-gambling issues appeared to detract from clients' wellbeing through health and social impacts that, if not directly caused by the gambling, did possibly mediate upon clients' recovery.

Who is the problem gambling workforce?

Two-thirds of the workforce (n=88) agreed to participate in a fact-finding survey and interview process. Most (70%) were over 40 years of age, primarily female (2:1), with Maori being the predominant ethnicity. Tertiary qualifications were usual, with two-thirds either qualified with a degree or currently enrolled in one. One in four had previously worked in an AOD provider organisation. The majority were providing clinical work for problem gambling less than full time, with Motivational Interviewing, followed by Cognitive Behavioural Therapy the primary modes of therapy used.

Can the workforce deliver a wider approach?

Practitioners were asked to estimate their perceived strength in providing assessment and interventions peripheral to the problem gambling, as may be required in addressing wider issues than the gambling. Clients often present with a range of coexisting issues and problems, which include social issues that impact upon clients' stress and negatively upon their recovery, unless addressed.

Strongest beliefs were held by practitioners in their ability to address suicidal ideation, depression, relationship issues, AOD issues, budgeting and conducting a DSM assessment. These positive beliefs were reported by 27% to 44% of practitioners. A smaller percentage reported strengths with assisting with Work & Income NZ issues, associated legal issues, and negotiation with housing issues (17% to 19%).

Up to half of the practitioners appeared to have confidence in providing assistance to clients

affected by problem gambling in a range of additional, but relevant issues that may comprise a wider approach to treatment of problem gambling. The additional time resource per client to address this wider range of issues may require increasing the size of the current specialist workforce. There appears to be sufficient practitioners (currently estimated at 140) to provide an initial demand for the practitioner's time, however there are assumptions as yet untested, that clients will remain longer in treatment when these other needs are included in treatment.

Earlier interventions may also increase help-seeking

The above research focuses upon the ability of the specialist treatment provider workforce to address issues in addition to the problem gambling. A wider model to intervene in problem gambling will also include earlier interventions identified opportunistically by health and social services not specialising in problem gambling treatment. These are likely to be brief interventions that may work well with moderate gambling problems, with those identified with more serious gambling problems being motivated to refer to specialist services. The training of a wide range of health and social services to provide these services will no doubt be a challenge. To motivate these services to prioritise or even apply their resources towards this new and additional call upon their resources, we will have to overcome obstacles of legitimacy, importance and confidence to intervene. It may also create a further, as yet unknown, demand for specialist problem gambling treatment services.

Conclusion

There has been a recent estimate given by a leading researcher in the field that perhaps only 2%-3% of problem gamblers seek help (Volberg 2007, personal communication). If the wider approach meets the desires and needs of clients, and the proposed extended opportunities for those affected by problem gambling is successful in increasing referral (in addition to providing early help for those less affected), the demand for services may increase substantially. In this circumstance, we may have to remind ourselves that this increased pressure to provide help for this 'new' addiction is offset by the knowledge that by addressing wider issues than the gambling we may ensure that recovery is achievable for more, and hopefully, for longer.

Sean Sullivan
Abacus

ATRIG AGM

The Addiction Treatment Research Group (ATRIG) will have its Annual General Meeting at the combined APSAD/Cutting Edge conference being held in Auckland at the Aotea Centre. The meeting will take place during a lunchtime at the conference. Full details will be available in the conference programme. All past present and future members are warmly invited to attend.

NAC Report

Last year I wrote briefly about a study then in the planning stages called the Treatment Evaluation of Alcohol and Mood (TEAM) Study. This is a multi-site study headed by Prof Doug Sellman. It is a randomised controlled trial of combined pharmacotherapy for patients with coexisting alcohol dependence and a major depressive illness. The study was initiated late last year with seeding money from the National Drug Policy Discretionary Fund. In June of this year we were informed that we had been successful in obtaining a major project grant from the Health Research Council (HRC). The combined funding from the NDP and HRC means that the TEAM study has been funded to a total of just over one million dollars. This makes it the largest clinical trial in the addiction treatment field to be undertaken in New Zealand, and a study of potential international significance.

Alcohol is "our favourite drug" while depression has been described as the "common cold" of mental health. Many depressed people turn to drink. However, alcohol has an overall depressant effect so can worsen or even cause depression. These observations have been reinforced by our own data from a representative outpatient sample at CADS services in Hamilton and Christchurch which shows alcohol dependence to be the most common substance use disorder (excluding nicotine) while major depression is the most commonly co-occurring psychiatric disorder. In fact a full 30% of the total sample had both conditions.

The TEAM Study is about "alcoholic depression"; depression in alcohol dependent people.

Despite being very common, it remains unclear how best to treat people with this combined problem. The traditional distinction between primary and secondary depression has been used to guide treatment in the past, with depression secondary to alcohol misuse treated by focussing on achieving abstinence, while primary depression was often not diagnosed unless a person remained depressed once abstinent, in which case antidepressant medication was then employed. However this distinction between primary and secondary is not as clear as some of the literature might suggest. Furthermore, with the expansion of outpatient services depressed people entering treatment for alcohol dependence are less likely to experience inpatient treatment, an important opportunity for determining the nature of the depression.

On the basis of the more traditional approach outlined above, it could be asked what happens to patients who aren't able to achieve abstinence and why are those who do achieve abstinent and remain depressed required to go through such a lengthy process before being given the opportunity to try antidepressants? Some people might respond that there would be no point prescribing antidepressants whilst a person was still consuming large quantities of the depressant alcohol. But is this correct? In fact over the past 10 years there have been four studies looking at antidepressants for depression initiated whilst patients were still drinking heavily and three out of four found significant improvements in mood (one also found improvements in drinking outcome). These studies were all small however, with between 30 and 80 patients, three excluded patients with "secondary" depression and none considered the role of antidepressants in conjunction with the anti-craving drug naltrexone, which is increasingly becoming an important component of "best practice" outpatient treatment for alcohol dependence.

In the TEAM Study all participants will receive 12 weeks of naltrexone and supportive clinical casemanagement over the 24 week course of the study. Half of the group will be randomised to receive 12 weeks of Citalopram, an SSRI antidepressant, and half a placebo. Participants will be followed up 12 weeks after the end of the pharmacotherapy phase of the trial as part of the ongoing casemanagement and will be recontacted at 12 months for an independent follow-up. As well as investigating the primary questions of the effectiveness of citalopram in improving mood and reducing drinking we will also be examining predictors of differential response using baseline characteristics, genetic and pharmacokinetic factors. A study of this size also presents the opportunity to examine a range of other important clinical issues. One example is the impact and determinants of therapeutic alliance, which will be investigated by Deirdre Richardson for her PhD dissertation.

We are in the early stages of recruitment and over the next three years we plan to recruit and treat 220 patients with alcohol dependence and a current major depressive illness. Treatment will be provided in six outpatient DHB clinical settings around the country. These sites, and the responsible senior medical officers are: Northland (Alistair Dunn), Auckland (CADS Central, John Berks), Hamilton (Murray Hunt), Nelson (Lee Nixon), Christchurch (Alfred Del'Ario), and Dunedin (Gavin Cape). In addition patients will be recruited and treated onsite at the National Addiction Centre in conjunction with the Departments. Project management of the study is being undertaken by Karen DeZwart, the research investigators are Prof Sellman, myself, Daryle Deering, Assoc Prof Martin Kennedy and Professor Peter Joyce. We have 14 research clinicians spread across the six sites undertaking most of the recruiting, assessment and treatment. Please contact us or one of the sites directly if you are nearby and have a patient who might be interested!

Dr Simon Adamson
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National Addiction Centre

Addiction Treatment Research News is the official newsletter of the **Addiction Treatment Research Interest Group (ATRIG).**

ATRIG was established in 1997 to promote research in the alcohol and other drugs field in New Zealand.

The **executive committee** are: Simon Adamson (Chairperson), Klare Braye, Alistair Dunn, Ria Schroder (ATRN Editor), Robin Shepherd, Janie Sheridan, Lindsay Stringer (Secretary)

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The Substances and Choices Scale (SACS) Is Available Now!

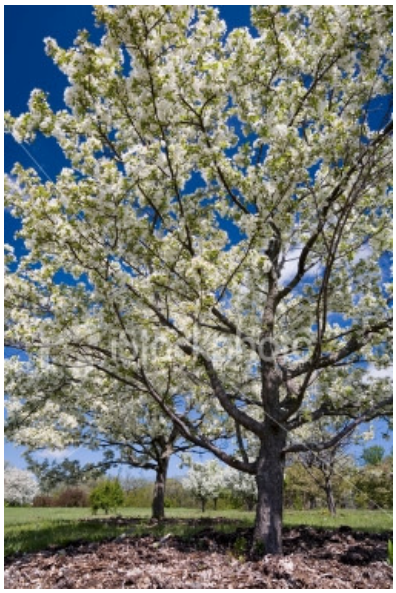
Having difficulty identifying alcohol and drug use related problems in young people attending your service? You might want to consider using the Substances and Choices Scale (SACS), a new youth AOD (alcohol and other drug) screening and outcome measurement instrument that is free to download from the internet (see http://www.sacsinfo.com). The SACS is a pen and paper questionnaire structured in three sections. The first section records the number of occasions the young person has used a variety of substances in the last month. The second section measures both substance use related symptoms and substance related harm and yields the 'SACS difficulties score' from 0 to 20 which can be used to screen or measure change through a treatment episode. The third section asks about tobacco use.

The SACS investigation team, a Waitemata District Health Board (WDHB) and University of Auckland collaboration with support from the Alcohol Advisory Council of New Zealand has been developing and testing of The Substances and Choices Scale (SACS) over the last 3 years. The first stage of the SACS project involved designing the Substances and Choices Scale and is described in the 2005 ATRM (available at www.addiction.org.nz). More recently we have completed psychometric testing and validation of the SACS instrument in a series of community and clinical samples. This testing demonstrated that the SACS Difficulties Score has very good test-retest, internal and split-half reliability, correlates well with the CRAFFT and the POSIT and can be used to predict membership of a clinical group with excellent sensitivity and specificity. Furthermore the SACS Difficulties Score can detect change over time. Young people rated the SACS as easy, helpful and not upsetting. Feedback included that they found it easy to understand and complete the questions; they liked the opportunity it provided to consider their own (drug-taking) behaviour and the confidential nature of the tool.

The SACS is highly acceptable to young people and easy for clinicians to use and score. Its reliability and validity is equivalent or better than other available youth AOD instruments. The SACS has been designed in a similar format to the SDQ (Strengths and Difficulties Questionnaire) so that the two instruments can be used together. Routine use of the SACS should help to raise awareness and increase the focus on AOD problems in young people attending adolescent health, mental health and AOD services. What's more the combination of the SDQ and the SACS can measure outcome as young people progress through the treatment process.

The SACS questionnaire (and extensive information about the instrument and its use) is available now on http://www.sacsinfo.com. The article "The Substances and Choices Scale (SACS) - the development and testing of a new alcohol and other drug screening and outcome measurement instrument for young people" - Christie et al (2007) is now available via the following link (http://www.blackwell-synergy.com/toc/add/0/0) and will be published in Addiction in the near future.

Grant Christie
Community Alcohol and Drug Service, Waitemata DHB



Consumer feedback is considered essential for the development of CADS Auckland. A range of strategies, developed and implemented in partnership with the CADS Consumer Team, are utilised to elicit client feedback. One of the strategies employed are surveys[1] and while there are inherent limitations in surveys, the findings provide another piece of the jigsaw on which CADS can build a picture of how clients are experiencing services and how services can be improved.

This report looks at the themes identified in the 2006 survey responses from clients of Auckland Methadone Service (AMS), Community and Home Detox Service (CHDS), In-Patient Detox Service (IPU/in-patient unit) and CADS Counselling Service. Although the questions differ slightly in the four different surveys, the goal is the same: to find out whether clients have found CADS responsive to their needs.

Overall respondents expressed a high degree of satisfaction with the staff, treatment and service they had received across all four services; this was especially apparent in the feedback from the clients of the Community and Home Detox Service who were overwhelmingly positive in their responses.

Community and Home Detox Service (CHDS) respondents talked about the professionalism of the CHDS team partnered with empathy and understanding: *"My nurse was wonderful, always professional, non-judgemental, kind, understanding, and listened to me".* Being listened to was also highlighted as important to clients of the methadone service who said they appreciate case managers who are non-judgemental and supportive, and who help clients find their own solutions to problems.[2] The value of such attributes cannot be under-estimated for all AOD clients and are of course relevant to all positions within CADS: medical officers, nurses, social workers, admin officers, to name but a few.

Receiving information was listed by many AMS clients as one of the benefits of attending case manager and medical officer appointments, whether the information is about medications, about guidelines, policies and protocols, or what other options are available to them.[3] *"They made sure I knew about the support organisations that were available".*

In regards to receiving information, a CADS counselling client made a critical comment that *"We get good handouts but they're not talked about or followed up on".* For many clients, being handed information (brochures, booklets, etc.) is only the start of what they see as a process; they expect the staff will talk to them about the content - so staff themselves need to be familiar with the information they provide clients and to answer any queries clients and support people may have. Also, not talking to the client about the information is problematic in that it assumes a certain level of client literacy.

The need for improved communication between members of staff, and between staff and clients had been a theme in previous IPU survey responses. While the number of comments about these issues decreased significantly during 2006, clients of IPU continued to request information specifically about the medications they are being prescribed. *"We need to have meds [medications] explained in full"* and *"explain to us about blood tests and what the results mean."*

Medical staff, who help clients understand the physical consequences of their alcohol and drug-taking and who provide clients and their support people with information about medications and their side effects and the detox process, are highly valued by clients of both methadone and detox services. Some clients of AMS, however, felt the appointments they attend with medical officers would be more helpful if the approach was holistic rather than focused primarily on methadone and their AOD use.

Comments by some clients of AMS suggest there is still room for improvement in ensuring clients receive and understand important information. For example, some clients did not appear to realise that the service can share information with other health professionals involved in clients' care. Although clients are informed of this early in treatment, most are frequently feeling unwell at this stage, so it is essential that important issues like the limits of confidentiality are revisited and discussed with clients in an ongoing way not as a one-off event.

This was also highlighted by several IPU respondents who said that in the early stages of withdrawal or stabilisation they do not feel well enough to retain information or to participate in planning their own treatment. However, they added that as they started to feel better, they appreciated being encouraged to become more actively involved and in so doing, developed a new-found sense of responsibility for themselves and their futures.

It is acknowledged that clients' distress and physical discomfort in the early stages of contact with the service does require a delicate balance for how and when information is given. However, accurate information communicated effectively – and in a timely way - equates to clients being fully informed. It is only through

receiving full information that clients can make informed decisions and actively participate in decision-making about their own treatment and recovery.

When asked how the services could be improved, twenty per cent of the IPU respondents requested more groups and 'fun' activities for *"mental stimulation"* and to *"relieve the boredom"*. Suggestions for activities included more walks and outdoor activities and organised indoor activities such as chess, scrabble, pool competitions, games, and an art group. There were also requests for educational groups covering communication *skills ("How do I talk to my family about my addiction?"),* anger management, parenting, relationships, diet and nutrition.[4] Clients of AMS requested practical advice and assistance from case managers with *"general life management"* and the practical problems clients have with housing, legal issues, budgeting etc.

CADS Auckland has 6 counselling units including the abstinence-focused CADS Mt Eden. Analysis of responses from all six units indicate that clients feel they are treated with respect by staff who are knowledgeable about alcohol and drug issues, understand the kind of help the clients want, help clients identify some clear goals, provide a service appropriate to clients' culture and/or lifestyle, and encourage the involvement of support people in clients' care. Clients are greeted in a friendly and professional manner both when they telephone and when they enter the unit; they feel involved in making decisions about their treatment/ care, and feel encouraged to give comments, complaints and compliments to the service. Some units rated higher than others on specific questions but satisfaction with the service as a whole was very high.

Better promotion of and information about CADS is a constant request from clients of the Counselling services. Responses indicate that most people find out about CADS from other services, friends/family members and GPs, though the number of people finding out about CADS in the telephone book has more than doubled since the service was made easier to find in the phone book. Nevertheless, comments like *"CADS need an accessible image and profile"* and *"you need to let more people know about CADS; some people have been looking for this service but cannot find it"* suggest work still needs to be done to make people aware of AOD services available to them in Auckland.

One of the challenges for CADS is responding to the 25% of clients of the Counselling Service who indicated that CADS' hours do not fit easily with their own commitments and schedules. This was especially apparent at the unit in Central Auckland where 33% of respondents indicated they find the hours restrictive. The only unit where this was not an issue was CADS Mt Eden which operates a group programme mainly at night. Repeated requests for after hours access led to the introduction of a range of strategies including CADSonline[5], and evening groups and appointments at the other five counselling units, but client comments suggest it is still difficult for some people to attend, particularly those who are working. *"If I was working I wouldn't be able to come here and I may have relapsed"*.[6]

Throughout the different surveys a constant theme emerges: encouragement is one of the most valued things staff can provide for clients. Those clients who got it really appreciate it, those who don't, want it. *"It'd be nice to get some positive feedback when I make good decisions"*. Having someone believe in you, in your ability to make positive change, who acknowledges the positive progress you make regardless of how small those steps might seem from the outside, cannot be undervalued – and can make all the difference to someone seeking to engage with CADS.

Clients of all CADS services (and potential clients) are informed of survey results (and other feedback) via pRogReSsioN, the quarterly Consumer Team newsletter, and posters outlining the themes identified are, wherever possible, displayed in CADS Counselling units. Staff have access to the survey results on the CADS Intranet and reports are presented to the various services. This feedback is incorporated into continuous quality improvement activities, and into strategic and team planning.

It is interesting to note that the findings of the surveys are in line with the feedback received through other routes such as suggestion boxes, and conversations between clients and staff and the Consumer Team – the surveys seldom reveal any surprises. By providing a range of feedback avenues clients can comment, make suggestions, promote ideas at any time during their engagement with CADS, and the service can keep current with how clients are experiencing the service provided. And sometimes clients are fortunate enough to see the changes implemented as a result of their feedback.

Sheridan Pooley, CADS Auckland Regional Consumer Advisor

1 The frequency of surveying varies between services: ongoing surveying is conducted in Community and Home Detox Service, In-patient Detox, Altered High Youth Service, and Pregnancy and Parental Service, with all clients being offered a satisfaction survey; clients of the Methadone Service and the CADS Counselling Service are invited to participate in surveys for a 4 – 8 week period each year.

2 For the sake of brevity and simplicity I have used terms like "clients of the methadone service" rather than "clients of the methadone service who responded to the methadone survey".

3 This was a theme in the results of the methadone, IPU, and counselling surveys.

4 The IPU Groups Co-ordinator with input from the Consumer Liaison has developed a revised programme taking into account client suggestions and requests.

5 CADSonline is online AOD group counselling that is free to anybody in the greater Auckland region. Participants can see live video of the facilitator and can communicate with them and the other group members using real time audio; they are not visible to anyone else, so can maintain a level of privacy.

6 Greater access to after hours has also been requested by CHDS and methadone clients.

Adolescent Exposure to Benzylpiperazine (BZP) in Rats: Subsequent Behavioural Effects in Adulthood

Adolescence is a vulnerable period in an individual's life. Any choices or changes made to the developing body or brain during this time can impact positively or negatively on the functioning of the individual in adulthood. Extensive literature and research has addressed adult drug use and consequences of this use (Robinson & Kolb, 2004). There is, however, limited research into the long-term consequences of adolescent drug use on subsequent functioning in adulthood. Experimentation with drugs or mind-altering substances typically begins during adolescence (Merline, O'Malley, Schulenberg, Bachman, & Johnston, 2004). New Zealand health promotion strategies focus on harm reduction methods and an appreciation of adolescent psychosocial development in which experimentation with drugs plays a part (Bennett & Coggan, 2000). Harm reduction is based on the idea that mood-altering substances are a normal part of human nature and use of them should be reduced rather than totally banned.

Benzylpiperazine (BZP) was initially introduced into New Zealand as part of the policy of harm reduction (Bowden, 2004). There is evidence from studies on humans (Bye, Maunro-Faure, Peck & Young, 1973: Campbell, Cline, Evans, Lloyd & Peck, 1973), rodents (Baumann, Clark, Budzynski, Partilla, Blough, & Rothman, 2004) and monkeys (Fantegrossi, Winger, Woods, Woolverton & Coop, 2005) that BZP has stimulant drug properties comparable to amphetamine-like drugs. Therefore, BZP has been marketed as a safe and legal alternative (Janes, 2004) and aimed at the population of individuals abusing amphetamine or methamphetamine. There is, however, no evidence to support this presumption. Conversely, if this viewpoint is correct, it fails to consider the adolescent population of individuals who have embraced the consumption of the so-called "legal highs" (*The Christchurch Press,* 3 November; 15 November 2004). Adolescents may initiate drug use for a variety of reasons, but once a drug of abuse has been administered to the human brain, profound changes can occur. Additionally, claims that BZP is "safer" than other amphetamine-type drugs can lead young people to ingest doses well in excess of the recommended range with some serious toxic consequences (Gee, Richardson, Woltersdorf & Moore, 2005).

Benzylpiperazine (BZP) is the active agent in a number of "party pills" or "herbal highs". Research over 30 years ago suggested that the subjective effects of BZP are indistinguishable from those of the amphetamines (Bye, et al., 1973: Campbell, et al., 1973). More recently, it was shown that rhesus monkeys will intravenously self-administer BZP at rates as high as they would for cocaine, leading to the conclusion that BZP has amphetamine-type abuse potential (Fantegrossi, et al., 2005). Methamphetamine abuse by humans is known to produce cognitive and mood deficits that continue long after the use of the drug has ceased (London, et al., 2004; Rawson, Gonzales, & Brethen, 2002; Simon, Dacey, Glynn, Rawson & Ling, 2004). It can also interfere with normal brain and behavioural development in rats especially when experienced 41 to 50 days after birth (Vorhees, et al., 2005). Developmentally, days 41 to 50 in rats are equivalent to adolescence in humans and typically is when experimentation with addictive drugs begins (Laviola, Adriani, Terranova, & Gerra, 1999). In both rats and humans the adolescent brain is not fully mature and represents "a brain in transition" differing both anatomically and neurochemically from the adult brain (Spear, 2000). It therefore follows that, during adolescence, the brain could be particularly vulnerable to any interference with its further development. As it would be unethical to assess any long term behavioural consequences of earlier drug use in humans, an animal model provides a solution. Animal models control for history, experiences and environmental conditions of the subject and avoid the complex issues of polydrug use, drug purity and any pre-drug psychopathology that possibly compromises human drug research (Koenig, et al., 2005).

Pharmacological studies of methamphetamine, MDMA and methylphenidate administered to adolescent rats have shown to increase later anxiety-like behaviour (Calezon, Mague, & Andersen, 2003; Clemens, van Nieuwenhuyzen, Li, Cornish, Hunt & McGregor, 2004; McGregor, et al., 2003). This has been explained by alterations in the serotonin levels in the developing brain. That is, the administration of a stimulant drug increases serotonin in the adolescent brain, causing inactivation of the

serotonin system while it is maturing, thus leading to decreased amounts of serotonin produced in the brain in adulthood (McGregor, et al., 2003). Therefore, as BZP shows stimulant drug properties, when it is administered in adolescence it is expected to produce similar long-term effects. The possibility of increased anxiety in adulthood because of adolescent BZP exposure is extremely important because appropriate levels of anxiety are essential for an individual's ability to stay healthy and resist or combat disease (Garau, Marti, Sala, & Balada, 2000).

Adolescent male and female rats were given either BZP 10 mg/kg for 10 days or 25 mg/kg for 4 days, or saline. Approximately 17 days later (while drug free) assessments were made of their current anxiety or emotionality levels. Compared with saline controls, rats that had been previously treated with BZP exhibited increased anxiety-like behaviour on all three empirically supported measures of animal emotionality. Additionally, the higher dosage group showed significantly higher emotionality in contrast to the daily- exposed or saline-exposed group. This suggests that a higher dosage of BZP over a shorter time frame produces more detrimental effects than a smaller dosage over a longer time frame. Overall, the results were consistent with BZP treatment during adolescence leading to heightened anxiety-like behaviour in adulthood (Aitchison & Hughes, 2006).

Although direct extrapolation from this research to humans must be approached cautiously, many former animal models have been useful in predicting long-term responses in humans. For example, Andersen et al (2002) showed that chronic treatment with typical neuroleptic medications can induce brain morphological changes that are similar in rodents and humans (Andersen, Arvanitogiannis, Pliakas, LeBlanc, & Carlezon, 2002). The implications of this study for the greater population may be far-reaching, regardless of whether or not researchers fully agree on the validity of animal models in studying drug-induced anxiety. Decreased serotonin in the brain has been associated with aggression, impulsivity and risk-taking (Dawe & Loxton, 2004) and these behaviours have been correlated with substance abuse (Chambers, Taylor, & Potenza, 2003). Paradoxically, increases in anxiety and the reduction of serotonin could in turn lead individuals to self medicate with illegal drugs because of negative affect, or conversely, using drugs because of greater impulsivity or risk-taking behaviours. This research is vitally important because of the long-term effects on the present generation of adolescents when they reach adulthood. Census data indicates that adolescents and young adults (15 – 24 years of age) make up 15 to 16 percent of the total population (Ministry of Youth Affairs, 1996). In five years or so it is possible that a significant section of the BZP-using youth may be experiencing the detrimental effects of what is considered presently to be a recreationally safe substance.

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References

A full reference list is available from Ria Schroder (ria.schroder@otago.ac.nz)

Any Research in the Addiction Field to Share?

To keep our readers up to date with research in the field, we are always looking for new areas of research to report on in the ATRN. If you know of any research being conducted in New Zealand that is applicable to the addiction treatment field and you think it would be good to share with others please contact Ria Schroder (ATRN Editor) at ria.schroder@otago.ac.nz or phone (03) 364 0480. I look forward to hearing your ideas.

Combined APSAD and Cutting Edge Addiction Conference

two nations, ten cultures?

Aotea Centre
Auckland, New Zealand
4-7 November 2007

Don't miss your opportunity to benefit from early registration for this conference.

Early bird registrations close 7/9/07.

Go to www.twonationstencultures.co.nz to register online now.

Look forward to seeing you all there.

Message from the Chairperson

Cutting Edge is well established as an important annual event in the calendars of a wide range of addiction treatment clinicians, managers, researchers, consumers and policymakers. This year Cutting Edge will be taking on a decidedly different flavour as it has joined forces with Australia's annual APSAD conference to produce an Australasian-wide event to be held in Auckland 4-7 November – the Two Nations Ten Cultures? conference.

APSAD is the Australasian Professional Society on Alcohol and Other Drugs. I have attended two previous APSAD conferences and many Cutting Edge conferences and have greatly enjoyed both events. Whilst they are sufficiently compatible to have been able to bring about this one-off collaboration there are certainly distinct differences between the two conference series. Of greatest interest to ATRN readers may be the fact that APSAD conferences have typically been much more research-focussed and are somewhat more international in flavour than Cutting Edge. This provides a great opportunity for New Zealanders who have difficulty gaining support to attend conferences outside of New Zealand to be exposed to a wider breadth of research. It is also a chance for New Zealand researchers to expose our research to a wider audience. Research is an inherently collaborative exercise, and whilst this might more typically involve collaboration with colleagues within our departments or institutions there are also many instances of collaboration across organisations and between countries. The combined conference will be a great chance for researchers from both sides of the Tasman to meet, talk, and share research interests.

We will again be holding the ATRIG AGM at the conference and I look forward to seeing many of you there.

Dr Simon Adamson
ATRIG Chairperson

Update from the Faculty of Medical and Health Services, University of Auckland

The Faculty of Medical and Health Sciences, at the University of Auckland, is home to the Addiction Research Network (ARN) – a group of researchers involved in alcohol and other drug research. Below is a summary of the type of research being undertaken by members of this group.

Ross McCormick is working with Samson Tse and the phobic trust on issues around dual diagnosis, and also with Linda Bryant on secondary analysis of qualitative data from community pharmacists around their role in New Zealand with respect to services for drug misusers. He is also involved in a study of prescription drug misuse (see below). Ross has a number of publications in press, including one in the New Zealand Family Physician about changes in prevalence between 1995 and 2003 of Auckland general practice patients with problem use of alcohol, the second a "How to Treat" article in New Zealand Doctor about smoking cessation written together with Trish Fraser.

Janie Sheridan is currently involved in qualitative research into prescription drug misuse issues for primary care. The study is being coordinated by Rachael Butler, with support from Ross McCormick, and involves interviews with 20 GPs, 20 community pharmacists and 20 other key experts and is looking at the types of drugs being misused, how they are obtained, issues for health professionals and the potential for future interventions. It is hoped that the study will lead to a national quantitative study next year. Janie is also running a project developing evidence-based information for party pill users and clinicians. The project is being supported by a team of experts, and coordinated by Lucy Dunbar. The experts are evaluating the evidence, deciding what information should be included in information sources, and focus groups and interviews will be undertaken to provide feedback on these information sources. Another major area of interest is in developing the role of the community pharmacist in providing screening and brief interventions for problem drinkers. An initial survey of Auckland pharmacies indicates an interest in being involved in this type of work, and future studies will include qualitative interviews with pharmacists around barriers and opportunities, and it is hoped that New Zealand will be able to be involved in a UK based RCT.

Bruce Russell, from the School of Pharmacy, is currently working on a number of small clinically based projects designed to determine the effects the active constituents of Party Pills i.e. BZP and TFMPP have on people, specifically: whether these drugs are likely to be involved in significant drug-drug interactions using human liver tissue; how long it takes for these compounds to be absorbed, what

their metabolites are and how long its takes for all of them to be eliminated from the body; what the acute effects of these compounds are on brain function and cognition using EEG ; whether regular use of these compounds has caused long term cognitive impairment or changes in mood; what the acute effects of these compounds are on mood; and what the acute effects of these compounds are on the human brain using fMRI.

Peter Adams is currently completing two books, one on gambling and the other on a social approach to addiction. These should be published before Christmas (2007). Research activities focus around issues in gambling, moral jeopardy related to industry funding and family approaches to addiction.

Trecia Wouldes is Principal Investigator of the Auckland site of a 5-site study investigating the development of children born to mothers who have used methamphetamine (P, Pure, Crystal meth, Ecstasy) during their pregnancy. The other 4 sites are located in Hawaii, California, Oklahoma and Iowa. The Auckland site study is just finishing its second year of recruitment and has recently received funding that will allow us to follow these children until they are 3 years of age. She is also co-investigator with Associate Professor Lianne Woodward in a longitudinal study of infants born to women who are on the methadone programme. At birth, the infant's brain is scanned using MRI. Almost 100 infants have been scanned and are followed up at 12, 24 and 36 months of age. At present planning is underway to assess the children's development at 4.5 years of age. Trecia is also planning a study that will investigate the awareness of FASD in New Zealand, and is currently carrying out focus groups with health care professionals to determine what information they provide to women who are pregnant or of child bearing age.

Robyn Whitaker is Primary Investigator on a study developing a multimedia mobile phone-based smoking cessation programme for young adults. She is also assisting in the implementation of a text message, smoking cessation programme in the national quitline. She is also co-investigator on a study of the same programme in the UK (with London School of Hygiene and Tropical Medicine), and is part of a tobacco research group in the Clinical Trials Research Unit, where current studies include: the use of NRT (nicotine replacement therapy) for 2 weeks prior to quitting; providing a selection box of NRTs to increase access, choice and feeling of control over quit attempt; the revision of NZ Smoking Cessation Guidelines, plus work on cessation competencies and training for the Ministry of Health.

Hayden McRobbie has just finished a number of projects, one study looked at the withdrawal relief potential of three new nicotine replacement therapies (pouch, lozenge, and mouth spray); a survey to determine barriers for smoking cessation practitioners (trained by the NHF) in providing smoking cessation treatment and a survey of the attitudes, beliefs and behaviour of New Zealand nurses regarding smoking and smoking cessation. He is about to commence a feasibility study to determine if the quality of voice changes when people stop smoking. He is co-investigator on a mobile phone based intervention for young smokers, and different ways of using current NRT projects to increase quitting.

David Newcombe is a new member of staff at the faculty, and is developing the following research proposals: exploring cardiac harm associated with stimulant use (methamphetamine, BZP, MDMA) and the utilisation of the WHO ASSIST drug screening questionnaire as a tool for assessing substance use and linking to a brief intervention in community corrections.

Robin Shepherd is a lecturer in Social and Community Health. She is part of the research team at the Centre for Gambling Studies. They have recently completed phase I of a study examining why participants and their families seek treatment for problem gambling. These findings have paved the way to phase II of the research study in which the Centre for Gambling Studies, in collaboration with the Clinical Trials Research Unit, is examining treatment effectiveness among problem gamblers using telephone or face-to-face counselling at designated problem gambling services in New Zealand.

Felicity Goodyear-Smith is the team leader of a project which has designed the validated CHAT (Case-finding and Help Assessment Tool) which detects risky lifestyle behaviours such as smoking, problem dinking, other drug use and gambling) and mental health issues in primary health care patients. A Primary Mental Health Options project is currently underway involving the Health West and Harbour PHOs. This utilises the CHAT to detect suitable patients for funded interventions.

Amanda Wheeler is Director of The Clinical Research and Resource Centre based at Waitemata DHB, and is currently working on a number of research projects including the development of an outcomes tool for use with adult clients attending AOD treatment services, the development of a Pacific AOD (treatment provider) self-assessment tool and the notion of extending AOD treatment contact beyond an initial episode of care i.e. of *continuing care*, also referred to as *aftercare* or *step-down care.*

More information on ARN or any of the projects above can be obtained from Janie Sheridan:
j.sheridan@auckland.ac.nz

I have been reading… a case study which details the combined treatment of substance abuse and PTSD. The article (Batten and Hayes, 2005) raised a number of interesting issues including which problem to treat first and which provider (substance abuse or mental health) to use. A short discussion of integrated care models is followed by a call for an alternative theoretical model and focused technical innovation that applies to both mental health and substance abuse populations. The authors propose "…not an integration in the sense of putting together two or more disparate approaches or in the sense of coordinating a multifaceted team, but rather the use of treatments that are consciously tied to common functional processes".

It has been suggested (Hayes, Wilson, Gifford, Follette and Strosahl 1996) that one functional process which both PTSD and substance abuse have in common is Experiential Avoidance (EA). EA is described as "…a process in which a person is unwilling to experience a negatively evaluated private event (eg thought, feeling, memory, urge, bodily sensation) and thus takes action to reduce, numb or get rid of that private event despite behavioural costs from doing so" (Hayes et al 1996).

There is now an impressive range of symptomatically described disorders in which experiential avoidance has been demonstrated to be associated (Kashdan et al 2006). Also, a body of literature is steadily accumulating which shows that EA can be successfully reduced, sometimes with quite brief intervention, and that this has a significant impact on clients' functioning (Hayes et al 1999).

The treatment referred to in these articles is ACT (pronounced as one word – the same as the political party) which is an abbreviation for Acceptance and Commitment Therapy. The overall aim of ACT is to have the client "live well". This is achieved by increasing psychological flexibility – in other words, being responsive to present moment contingencies and taking action in the service of what is important to the individual.

The case study described a conceptualisation of the client's problem from an EA perspective and treatment of the client using ACT. The outcomes, showed not only a clear reduction of symptoms (not the aim of ACT) but also the reduction of EA, thought suppression and believability of automatic thoughts. There were also considerable gains in the quality of life which continued (with further improvement) at 3, 6 and 12 month follow-up.

Although this was only a single case report, the implication is that case conceptualisations which cut across diagnoses (and therefore treatment services) have advantages for the client in terms of ease of access to an appropriate service and may even enhance treatment outcome.

The article published in 2005 indicated that the authors planned to conduct a group study on the same co-morbidly diagnosed population. As I discovered at a recent conference, the author is now poised to submit a report of a group study using the same process and this appears to confirm the results shown here in one individual.

Questions about the utility and appropriateness of a symptom-based classification system to guide clinical interventions (not to mention structure entire services) for human suffering are by no means new. The 2002 publication by the American Psychiatric Association (Kupfer et al, 2002) from which I quote below clearly states the argument for an alternative way of conceptualising clinical issues:

"Epidemiological and clinical studies have shown extremely high rates of co-morbidities among the disorders, undermining hypotheses that the syndromes represent distinct etiologies. Furthermore, epidemiological studies have shown a high degree of short term diagnostic instability for many disorders… With regard to treatment, lack of specificity is the rule rather than the exception … many, if not most conditions and symptoms represent a somewhat arbitrarily defined pathological excess of normal behaviours and cognitive processes. This problem has led to criticism that the system pathologises ordinary experiences of the human condition.

Concerns have… been raised that researchers' slavish adoption of DSM-IV definitions may have hindered research in the etiology of mental disorders. Few question the value of having a well-described, well-operationalised, and universally accepted diagnostic system to facilitate diagnostic comparisons across studies and to improve diagnostic reliability. However, reification

of DSM-IV entities, to the point that they are considered to be equivalent to diseases, is more likely to obscure than to elucidate research findings.

All these limitations in the current diagnostic paradigm suggest that research exclusively focused on refining the DSM-defined syndromes may never be successful in uncovering their underlying etiologies. For that to happen, an as yet unknown paradigm shift may need to occur."

The novel aspect of this argument was that these criticisms came from inside the committee exploring possible research directions toward a more workable taxonomy (DSM-V). An answer to the call for an"*…as yet unknown paradigm shift*" could possibly be to focus on normal human processes such as EA which cut across symptomatic-based classifications.

Within the applied behaviour analysis camp, a research programme exploring psychological processes central to normal functioning has been underway for over 20 years (references supplied on request: david.mellor@otagodhb.govt.nz).
The advent of Relational Frame Theory (RFT is a theory of language and cognition – see Blackledge, 2003 for a fairly simple explanation) has played an important role within this programme. It links the fundamental principals of overt operant behaviour to behaviours which are subject to the influence of language (sometimes referred to as "rule governed behaviour"). It has given applied behaviour analysts the ability to account for features of human behaviour which could not be explained satisfactorily using only overt operant and respondent learning.

This research supports treatment which, firstly, is tied to an underlying philosophy and scientific research programme, and secondly, that potentially targets a wide range of human problems. Furthermore, at this stage, only a small number of normal psychological processes (of which EA is one) appear to account for a steadily growing range of problems. Those processes cut across current diagnostic categories, offering etiological explanations that the DSM will never do and lead directly to formulations and treatment that successfully address those processes.

David Mellor
Senior Clinical Psychologist
CADS – Dunedin

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Addiction Treatment Research Interest Group (ATRIG)

MEMBERSHIP/RENEWAL FORM

Please note all individuals wishing to be a member of ATRIG must join by completing this form regardless of current membership status.

Membership in ATRIG entitles you to the following

- three issues of the Addiction Treatment Research News via email
- membership in the ATRN email discussion group

PLEASE ENROL ME AS A MEMBER OF ATRIG (ADDICTION TREATMENT RESEARCH INTEREST GROUP). I HAVE READ AND SIGNED THE DECLARATION BELOW.

Surname _____ First Names _____

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(NB - You Must Provide An Email Address If You Wish To Receive A Copy Of ATRN)

The objectives of ATRIG are:

- *To foster interest in scientific research on treatment of people with alcohol and other drugs related problems in New Zealand.*
- *To disseminate and promote research findings related to effective treatment of people with alcohol and other drugs related problems within New Zealand.*
- *To support the development of improved treatment services for people with alcohol and other drugs related problems in New Zealand.*

Declaration

I support the objectives of ATRIG and wish to be a member of ATRIG for the 2007 calendar year. I understand membership fee is $20.

Signed _____ Date _____

Please make cheques payable to: ATRIG

I am interested in participating in an email discussion group around ATRN ☐

Thank you for completing this form and sending it back to:
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