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Assoc Prof Doug Sellman
Monograph Editor

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INTRODUCTION

This is the first New Zealand treatment research monograph in the alcohol, drugs and addiction area. It is comprised of a series of elaborated summaries of presentations made at the 2001 Cutting Edge Conference in Napier 13-15 September, 2001. It was the vision of members of the Treatment Research Interest Group (Alcohol, Drugs and Addiction) (TRIG) and the National Centre for Treatment Development (Alcohol, Drugs & Addiction) (NCTD).

The criteria for inclusion in the monograph were those papers presented during the Research Stream of the conference, with the addition of three further research papers presented at the conference. The order of the papers in the monograph is the same order as the order of the presentations at the conference.

These mini-papers have not been formally peer-reviewed. At this early time of the development of a New Zealand treatment research community in the alcohol, drugs and addiction field, it is considered important to be inclusive, in order for a critical mass of clinical researchers to accumulate. From this collegial base, a greater quantity of higher quality work will develop in the future, which in time may drive the development of a peer-reviewed journal.

This monograph is not purporting to document the entire treatment orientated research in New Zealand at the current time. However, it does contain some of the major pieces of work connected to the main organisations in New Zealand working in this area, including (from south to north):

- Dunedin Injury Prevention Research Unit – University of Otago;
- National Centre for Treatment Development (Alcohol, Drugs & Addiction) (NCTD), Christchurch School of Medicine, University of Otago;
- Alcohol Advisory Council of New Zealand (ALAC);
- Drug and Alcohol Research and Training (DART) – Auckland University;
- Auckland Regional Alcohol and Drug Services (RADS).

There are two Māori focused papers and one Samoan. Three papers are reviews, one is case-based and the remainder report original New Zealand treatment research data. There are four gambling papers and four opioid papers. However, there are none addressing nicotine treatment issues, which is an obvious gap to fill in future years. There are four papers focusing on adolescents/youth but none addressing the treatment needs of the elderly; another gap to fill in time. Seven of the papers relate directly to authors' PhD work in progress, which is particularly encouraging for the future of treatment research in New Zealand.

Two research-orientated prizes have traditionally been awarded at Cutting Edge conferences: the John O'Hagan Prize for the best presentation by someone under the age of 35 years; and the John Dobson Prize for the best opioid-related paper. The John O'Hagan Prize this year was awarded jointly to Lana Perese and Meg Harvey. The John Dobson Prize was awarded to Ian Sheerin. These three papers are included in the monograph.

It is likely this process will be repeated next year, with the publication of a further research monograph following the 2002 Cutting Edge Conference in Nelson and so on. It is hoped however, that in the not too distant future, this annual treatment research monograph may develop into a New Zealand based peer-reviewed journal of treatment research.

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HAD ENOUGH? EVALUATION (IN PROCESS)

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The principal objective of this campaign is to engage drinkers who are on the verge of taking action about their drinking. It is aimed at the 80+% (Donovan, 1991) of dependent drinkers who, for a variety of reasons do not access formal treatment services. Secondary objectives are to reach similarly placed drug users and to provide a therapeutic resource for treatment workers to use with their clients.

The campaign bases itself upon advertising the words HAD ENOUGH? in community newspapers. Those interested are invited to ring an 0800 number (Alcohol Helpline) and/or access the internet website (www.alcohol.org.nz). The only reference to alcohol is in the web address. They are sent, immediately, an information pack including an encouraging letter, a video, and a small workbook based on the video. The video portrays the stories of four people who are going through or have completed the stages of change in their own alcohol and drug related behaviour, their experiences of treatment, and the factors that influenced the changes they made. An evaluation form and stamped return-address envelope were included. The literature does not record this type of intervention being tried before anywhere in the world.

The advertisements first appeared in the second week of May and to date 755 people have rung for and received the information pack. A further 473 packs have been requested by treatment services.

Of those sent to the public, 162 (21.4%), have returned evaluation forms. This may include some clients from treatment services, but where identified, they have been excluded. This low response rate limits the generalisability of the findings. There is an invitation for people to include their name and contact for follow-up interview purposes and 27 did. Most of these were from people in distress requiring assistance in referral and evaluation interviews have not been attempted.

Returns from Māori and Pacific people were higher than expected given that using a Helpline, receiving an information pack in the post and returning an evaluation form, were identified as barriers by Māori and Pacific advisers. For both youth and several ethnic groups this may be an acceptable way of providing a generalised early intervention. While youth expressed a disappointment in the usefulness of the video and the workbook, the campaign and resources were not developed with an expectation that this age group would be attracted. It was also expected that these same barriers referred to above would reduce the differences by gender. Again, there is some surprise that males may use this approach significantly more than females.

The summary data:

Total received: 162

(All figures are given in percentages)

Age		Ethnic		Gender	
Under 18:	16.7	Māori:	20.3	Female:	34.8
18-24:	10.5	Pacific:	8.6	Male:	65.2
25-34:	15.5	Asian:	6.1		
35-44:	26.7	Pakeha:	64.8		
45-54:	18.6				
55 and over:	11.8				

Of the under 18 year olds, 52% were Māori and 74% male. While all respondents commented on the video, 101 (62%) commented on the workbook.

Was the video useful to you?		Did you find the action workbook useful?	
Useful:	65.5	Useful:	69.3
A little:	27.5	A little:	27.7
Not useful:	6.8	Not useful:	2.9

The table below shows analysis of these data by age, ethnicity and gender.

	<u>Video</u>		<u>Workbook</u>	
	Useful	Not	Useful	Not
<18	38	31	27	18
18-24	35	12	58	0
25-34	64	12	74	5
35-44	56	7	72	3
45-54	70	0	71	0
55>	58	26	70	20
Māori	61	15	65	10
Pacific	50	7	64	9
Asian	80	0	67	33
Pakeha	53	13	65	30
Female	59	10	59	11
Male	56	11	63	3

The advertisement is now to be made more explicit and will be placed in selected national newspapers and magazines. After four months it is felt that this is showing promise as a way of reaching people at home with messages encouraging change. The use of the video and supporting workbook appears to be positively received by the age groups for whom they were developed.

WHAT MAKES PSYCHOTHERAPY EFFECTIVE IN ALCOHOL DEPENDENCE? RESULTS FROM A RANDOMISED CONTROLLED TRIAL

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Motivational enhancement therapy (MET) is a relatively new psychotherapy based on the principles of motivational interviewing [Miller & Rollnick 1991]. We have recently reported a three-arm randomized controlled trial, in which the effectiveness of MET was investigated in mild-moderate alcohol dependence (n=122), in a routine outpatient clinical setting, utilizing two control conditions, non-directive reflective listening (NDRL) and no further counselling (NFC) [Sellman et al 2001]. The mean age of the subjects successfully treated and followed up (n=122) was 35.7 years (range 15-59), 17.2% were aged less than 25 years. Men marginally outnumbered women (57.4% vs 42.6%) and Māori comprised 13.9% of the sample. 34.4% were married, 22.2% were separated, divorced or widowed and 43.4% had never married. The years of formal education ranged widely from seven to 22 (mean=11.7). 36.1% of the sample had at least one additional current DSM-IV disorder, divided into the three broad dimensions: depression/anxiety (17.2%), substance use disorder (13.9%) and conduct disorder/ASPD (7.3%). At six-month follow-up, unequivocal heavy drinking, defined as 10 or more standard drinks, six or more times, was found to be significantly less in the MET group (43%) compared with either NDRL (63%) or NFC (65%) ($p < 0.04$).

One method for investigating why a psychotherapy is effective is to obtain therapists' rating of the therapy according to key putative non-specific factors, such as rapport, and engagement. The therapists in the present study completed a series of ratings of the therapy for MET and NDRL based on a 10-point visual analogue scale anchored by the words 0 – "not at all", 5 – "moderately", 10 – "very". Five elements rated were:

- How engaged was this patient with the therapy?
- How much rapport did you have with this patient during the therapy?
- How much did you enjoy being involved in the therapy with this patient?
- How stressful (frustrated/anxious/dissatisfied) did you find the therapy with this patient?
- How well did this patient seem to grasp the concept of the therapy?

Thirteen subjects did not attend any of the therapy sessions leaving a sample of 69 participants, 38 of whom received MET and 31 NDRL. The average (median) ratings of the therapy (MET and NDRL combined) were 7 for engagement, rapport and therapist enjoyment, 3 for therapist stress and 8 for degree of patient grasping the concept of the therapy. When ratings according to whether the patient had received MET or NDRL were compared, enjoyment was significantly higher for MET. When ratings were related to treatment outcome (MET and NDRL combined) patients whose therapists had high ratings of therapy enjoyment were over three times more likely to do well compared with those with low enjoyment therapists. Similarly, patients whose therapists had low ratings of stress were about two-and-a-half times more likely to do well compared with those with high stressed therapists. These effects were compared with two key patient characteristics, which had previously been shown to be determinants of outcome, namely gender and the presence of comorbid drug disorder (largely cannabis abuse/dependence). Women were found to be three-and-a-half times more likely to do well compared with men and those alcohol dependent patients without comorbid drug disorder were over nine times more likely to do well in therapy. When the therapist ratings and these two key patient variables are entered into a multivariate logistic regression (dependent variable being unequivocal heavy drinking at six months followup,) three variables remain in a final model: gender, comorbid drug disorder, and therapist enjoyment. Treatment type (MET or NDRL) made no difference to this model. Therapist enjoyment of the therapy is therefore concluded to be associated with good treatment outcome independently of gender and comorbid drug disorder and irrespective of the therapy type.

Treatment implications of these findings are suggested as follows:

1. It is important to actively monitor feelings of enjoyment while undertaking psychotherapy with people who have alcohol dependence. If present they are a useful marker that the treatment is probably on track and that it is likely to be successful in terms of medium term treatment outcome.
2. Conversely when working with difficult or unlikeable patients, these findings suggest we must work hard and/or change tack, to achieve a spark of enjoyment that is likely to be associated with a successful outcome.
3. This strategy is particularly important when working with male clients or those with comorbid drug disorder, because women and those without comorbid drug disorder are likely to do relatively well in any event.
4. These findings may not be relevant to working with patients who have severe dependence or involving more intensive treatment, because the research from which these findings emerge was undertaken with people who had mild-moderate alcohol dependence and the outpatient treatment provided lasted for a six-week period only.

GAMBLING IN MILD-MODERATE ALCOHOL DEPENDENT OUTPATIENTS: PREVALENCE AND CLINICAL IMPLICATIONS

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General prevalence data indicates a substantial overlap between rates of problem gambling (PrG), pathological gambling (PG) and substance use disorders, including a rate of 9-16% PG among those with substance use disorders. In contrast the general population rates for New Zealand have been estimated at 2.1% PrG and 1.2% PG. There are no published data on PrG/PG in alcohol dependent outpatients.

Clinical issues include:

- ◆ Alcohol and gambling offered in the same recreational venues
- ◆ Highs and lows associated with gambling may trigger relapse
- ◆ Dually addicted patients are at greater risk for suicide
- ◆ Gambling addiction may substitute for alcohol addiction during recovery

We have completed a randomized controlled trial of motivational enhancement therapy (MET) in a representative clinical sample of people with a primary diagnosis of mild-moderated alcohol dependence [Sellman et al 2001]. A secondary aim of this study was to explore gambling issues in this sample. More specifically we sought to estimate the rate of gambling, PrG and PG, and the types and frequency of gambling modes used.

124 patients with a primary diagnosis of mild-moderate alcohol dependence (DSM-IV) undertook a baseline interview which included the South Oaks Gambling Scale (SOGS), the Gambling Inventory Questionnaire (GIQ) and the Diagnostic Interview for Genetic Studies (DIGS), including the PG section.

The sample were 58.1% male, 12.9% Māori with a mean age of 36.2 years and 35.2% were married. They had completed a mean 11.6 years education and 31.5% had a lifetime

cannabis use disorder. In terms of alcohol use, 33% had mild alcohol dependence, and 67% moderate dependence while mean typical weekly drinking was 52 standard drinks.

Findings: 79.8% gambled in the preceding six months with 28.8% gambling weekly. Overall the most common forms of gambling were Lotto (61.5%), Instant Kiwi (25.8%), Horse Racing (23.4%), Casino (20.2%) and Telebingo (15.4%). The SOGS identified 4.0% as probable PG and 19.4% PrG, while the DIGS made a DSM-IV diagnosis of PG for 4.0% of the sample (the same 5 patients as identified by the SOGS).

Next an analyses was conducted to examine whether or not type of gambling was related to risk of have PrG or PG. There was a strong association with the odds ratio (OR) for being identified as PrG/PG by the SOGS significant for Gaming Machines (OR=8.9), Dogs (OR=6.9), Casino (OR=5.6), Horses (OR=5.0) and Sports Betting (OR=4.1).

In conclusion the overall rate of gambling is not dissimilar to general population but the choice of mode is different and the rate of associated PrG and PG is significantly higher. Finally, the mode of gambling was found to be a strong predictor of problem gambling in this population.

The main practical implication of these findings is the need to actively address this problem in clinical settings. The first step would be through routine screening for gambling in A&D settings. A two-armed solution is proposed whereby mild gambling problems are treated on-site while more severe gambling problems are referred to specialist gambling agencies. The level of severity could be determined as part of the assessment process following screening. It is argued that A&D clinicians already possess the core skills required to address this non-substance addiction and only minimal training would be required to ensure competent implementation of brief interventions.

ALCOHOL MISUSE & PROBLEM GAMBLING IN A NEW ZEALAND PRISON POPULATION: ARE THEY COMMON INMATES?

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The overlap of problem gambling and alcohol misuse has been often recorded. One criterion for pathological gambling is criminal offending to sustain gambling. In a study conducted currently Abbott et al (2000) identified 31% of male inmates (n=357) had experienced significant gambling problems in their lives with 23% of these remaining current. Of these 16% were current pathological gamblers. Another current study (Abbott & McKenna 2000) identified 45% of women inmates (n=94) having gambling problems at some time with 34% of these being current. Some 76% of male inmates were hazardous alcohol users (compared with 61% of non-problem gambler inmates) with significantly greater use of heavy smoking and illicit drug use (other than marijuana) by the problem gamblers.

The misuse of alcohol may contribute to continuation of problem gambling behaviour through the common point of sale for each and may perhaps contribute to deterioration of the gambler's gambling behaviour through exacerbation of problems.

One hundred male inmates being admitted into a medium security prison were surveyed as to their gambling, alcohol and drug use prior to imprisonment. A brief gambling screen (the Eight Screen) was self-completed by inmates while assessment officers interviewed them around alcohol and other drug use, and completed a second longer validated gambling screen (SOGS). As a validation process for the Eight Screen all inmates scoring two or more on either gambling screen were assessed using DSM-IV criteria for pathological gambling. Each gambling screen identified 23% of inmates as positives for problem gambling (Eight Screen) or probable pathological gambling (SOGS) with 29% of inmates being positive on one or the other screen. Assessment identified 15% of the 100 inmates as meeting the criteria for pathological gambling (with some minor adjustment due to discharged inmates prior to assessment). The Eight Screen identified 91% of pathological gamblers (specificity 0.5; PPV 0.59) and the SOGS 82% of pathological gamblers (specificity 0.43; PPV 0.53). A lesser measure and possibly controversial categorisation of sub-clinical problem gambling was assessed using three or more criteria of pathological gambling (5 or more of 10 criteria identifies pathological gambling). Both Eight Screen and SOGS identified 17.4% false positives and 22.2% false negatives using this standard. An estimate was therefore assessed that 23% of the inmates were problem gamblers (pathological or sub-clinical problem gamblers). 24% of problem gamblers had been 'asked about their gambling', 21% had been given advice about their gambling and

38% would like help about their gambling however, no problem gambler in the study had been directed to receive treatment for their gambling behaviour.

Inmates were asked questions around their use of alcohol, namely if they 'felt they had a problem', had they tried to stop drinking, had they received advice around their alcohol use, and had the Court imposed treatment for alcohol misuse. 79% of problem gamblers answered at least one question in the affirmative while 54% of non-problem gamblers did so, indicating inmate problem gamblers were more likely to have a negative experience with alcohol ($p < .05$). Alcohol is often correlated positively with violent offending. Problem gambling inmates without alcohol problems were compared with problem gamblers with alcohol problems (as categorised by affirmative answer to one of the above questions). By categories of offending it appeared that in most violent offences for which the inmate was currently convicted, the problem gamblers without alcohol problems appeared to often exceed those with alcohol problems in likelihood of violent offending (aggravated robbery: 22% of alcohol problem gamblers verses 33% of non-alcohol problem gamblers; murder/manslaughter 9% verses 17%; but not in assault/kidnapping 17% verses 0%; sexual offences 13% verses 0%). Property offences were also higher amongst problem gamblers without alcohol problems (burglary 13% verses 33% of gamblers with alcohol problems; theft/fraud 9% verses 17%) while the reverse was true, as might be expected, with driving and drug offences (driving offences 13% verses 0% of those without alcohol problems; drug offences 4% verses 0%). High percentages of problem gamblers were Māori (75.9%) while the percentage of Māori who were non-problem gamblers was lower (40.1%).

The high level of problem gambling in prison populations, the disproportionate number of Māori with gambling problems in prison and the higher proportion of alcohol problems amongst those with gambling problems suggests a need to focus upon identification and intervention strategies both in prisons and post-release.

CREATING A TALK TO GUIDE THE WALK: THE DEVELOPMENT OF CULTURAL IDENTITIES BY MĀORI MEN UNDERTAKING TREATMENT FOR ALCOHOL AND DRUG USE RELATED PROBLEMS

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Background

The concept of cultural identity has frequently been cited as important in the health and well being of Māori. To date however, cultural identity has been defined in relatively rudimentary ways, relating primarily to participation in and knowledge of various aspects of Te Ao Māori. The current research attempts to extend the concept of cultural identity by examining the way in which Māori men entering treatment for alcohol and drug problems actively create (and have created for them) identities that draw on a range of ideas, including those related to "being Māori". The project was designed to contribute to a more in depth understanding of the recovery/treatment/healing process for Māori men who have substance use related problems.

Design

Data was collected via in depth interviews using a semi structured format in which participants were asked about their perception and understanding of their addiction and treatment, especially with regard to being Māori and being male. Data was analysed using discourse analysis, which identifies the linguistic processes and content, which individuals use to develop particular identities for themselves, in this case in relation to "being Māori". The research design involved interviewing participants at three points in time, firstly on entering treatment, then within 3 months following treatment, and finally at 12 months post treatment. A primary aim is to identify the ways in which participants' construction of themselves, especially as Māori, changes over time, with particular attention being paid to associated changes, or lack of change, in substance use behaviour.

Current Results

The data presented in the current paper was from three Māori men who took part in an interview when they first entered a Māori treatment programme. These results relate primarily to the way these men represent themselves in relation to "being Māori". Each of the participants presented different ways of being Māori. The first, Bill, focused on promoting himself as a rangatira/tuakana, the second, Mikaere, related primarily to aspects of whanaungatanga, while the third participant, Tu, presented as struggling with the tensions of developing a Māori identity within the context of his primarily Pakeha experience and negative experiences of Māori.

Bill seeks to define himself as being in a senior position, despite not being the eldest, by drawing on his personal abilities, referring to prominent aspects of his whakapapa and the inability of his older brothers to fulfil their roles. Mikaere primarily focuses on identifying general factors, which link him with being Māori, such as his affinity for the bush, which appear to be designed to ameliorate his limited contact with Te Ao Māori when he was growing up. In contrast, Tu struggles to identify as Māori in the context of the negative behaviour of his father and a relation who had been a significant role model for him. Tu's conflict occurs in the context of tension and ambivalence related to his own behaviour and attitudes.

Each of these participants describes and subscribes to a very different way of "being Māori", which is likely to affect the way in which they respond to Māori focused treatment programmes. Further they are likely to have differing needs and responses in terms of addressing aspects of being Māori, which may be related to their substance use. In short it is unlikely that one size will fit all.

Clinical Implications

The data presented provides a baseline for examining how cultural identities may be created by and for Māori men undertaking treatment for alcohol and drug problems. From this point it will be possible to examine how these identities are altered over time and how they relate to substance use. Given the qualitative nature of this study it is not possible to generalise to the broader population, but the data will help to identify issues worthy of closer consideration, as we seek to develop optimal Māori focused alcohol and drug treatment.

Different positions taken up by people developing identities in relation to "being Māori" are likely to be differentially associated with substance use and the various stages of therapy/recovery. Thus it is likely that if enough is known about the means by which specific subject positions/identities are created and maintained, it will be possible to develop and enhance aspects of Māori identity associated with control of substance use. This would be likely to involve challenging and problematising behaviour and attitudes inconsistent with the elements of cultural identity to which they aspire. Thus an important focus of treatment becomes reinforcing ascendancy of discourses of "being Māori" and other aspects of identity, which promote health and wellbeing. It is likely that individual Māori undertaking treatment for substance use will vary in relation to culture related needs. It will be useful to assess cultural identity related needs in a more sophisticated way than is currently possible. The results of the current research will contribute to providing a basis for development of such assessment.

ADDICTIONS COUNSELLING IN 2001

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The relationship between client and counsellor and the former's expectations of the latter and whether they are met, is the basis of a research project conducted with clients of three alcohol and drug treatment services. This was extended to include motivational influences on counsellor practice.

These issues are pertinent to the way treatment is likely to be purchased. Trends in Britain and Europe show not only a growing purchaser dissatisfaction with certain aspects of counselling (Harris, 2001) but a public disenchantment with its effectiveness (Mason, 1999). Counselling is being targeted by some addiction critics as a middle class indulgence, a professional conversation, trading on Woody Allen style neuroses. While this may be an unfair view, there are signs of a profound shift starting among purchasers in the UK in how they consider the role of counselling in the provision of alcohol and drug treatment. It is only a matter of time before New Zealand purchasers will pick up on this trend and demand evidence-based practice, using measured clinical outcomes to determine the selection of counselling interventions. But also, it appears that client expectations of what they want from treatment services do not always match up with what they receive. It is from this point that this paper proceeds.

Christie (1983) compared the interventions clients requested with the interventions they received: (a selection)

Intervention	% Clients requested	% Clients received
Abstinence training	12.3	23
Controlled drinking	41.4	33
Education on alcohol	0	7
Insight into drinking	2.5	13
Support and advice	19.1	10
Marital therapy	17.9	47
Job/financial	14.2	37
Leisure counselling	6.8	33
Social skills	6.2	33

Christie’s commentary suggests that clients were more likely to receive the interventions in which the counsellor has been trained and/or in which they have a particular interest.

McKechnie and Cameron (1992) following up on 2100 clients of alcohol and drug services summarised clients’ views thus:

- Our alcohol and drug dependence is not the primary issue and is unimportant when compared to problems associated with alcohol and drug dependence
- Our drinking and drug using makes sense even when problems are manifest
- We differ from other drinkers/drug users because we present to treatment services
- We presented because of an associated crisis, not because of dependence
- Rejection/referral by the primary care worker is the common reason for our agreeing/seeking alcohol and drug treatment service involvement
- Most conventional treatments we received were useless
- Simple human caring skills from the counsellors were helpful
- Some counsellors were better than others
- Among the counsellors there seemed to be no generally agreed body of knowledge about alcohol or drug problems
- The goals of intervention should be negotiated, appropriate, attainable and meaningful.

54% of these clients claimed that control over their drinking or drug using was not the primary problem – only 5% stating that control was the primary problem.

MacEwan (2001) interviewed 57 clients of alcohol and drug services. Mandated and otherwise coerced clients were excluded. The purpose was to test three hypotheses:

- that there was a hierarchy of need: information, help with decision-making, support for implementing change and counselling to understand better the causes, implications and consequences for change;
- that whatever the presenting request, clients would receive assessment, have their history taken and be given counselling;
- that treatment would be more intrusive than the client expected.

For these purposes, assessment was defined as data collection by the administering of screening and assessment questionnaires; history taking was an exploration taking at least 20 minutes; and counselling was a minimum of three hours or three sessions.

Client expectation	n	Expectation met	Assessed	Counselled
Information	21	3	21	6
Help with decision-making	16	7	16	7
Support to implement change	13	4	12	12
Counselling	7	7	7	7

(A further two people presented for an assessment and they received it).

When clients negotiated a higher order service they were listed against the higher order service. For example, a client arriving and wanting help with decision-making and subsequently wanting counselling, the expectation was listed as counselling. So, of the 57 clients, 50 were assessed and had a history taken and recorded without that being agreed and 34 received counselling without that being agreed.

Counsellors preferred to deliver more for longer than the client wanted. Partly this raises an economic issue. On limited budgets it might be more cost-effective to match the level of intervention with the client request. Partly this raises the issue of focusing on what can be achieved in the sessions the client is likely to attend. On average, clients attend services for less than four sessions (Feltham, 1998). While these two issues might be criticised for promoting symptom amelioration, the evidence suggests this is what most clients want. Who determines what is provided?

An observation on the concept of dependence was that clients tended to view dependence in terms of their own needs, urges, and diminished control, whereas counsellors focused on compulsive behaviours, physical dependence and family/employer expectations.

Norcross and Prochaska (1983) assessed counsellors' methods or orientation. To better understand why counsellors do what they do, this methodology was used with counsellors, including those of the clients (above) and the data compared with the 1983 study.

Counselling: Worker Orientation

Counsellors methods or orientation

(1 = no influence, 2 = weak influence, 3 = some influence, 4 = strong influence, 5 = primary influence)

Influence	Mean Average	
	Norcross and Prochaska (1983) n=479	MacEwan (2001) n=37
Clinical Experience	4.2	4.9
Values and personal philosophy	3.8	4.7
Graduate training	3.6	4.6
Postgraduate training	3.4	2.8
Life experiences	3.3	4.4
Placements	3.3	4.4
Own recovery	3.0	4.3
Type of clients I work with	2.8	1.6
Orientation of friends/colleagues	2.8	3.9
Outcome research	2.7	1.5
Family experiences	2.5	1.3
Own therapists orientation	2.4	1.0
Undergraduate training	2.2	3.3
Accidental circumstances	1.7	2.6

These data support raising the question of the way counsellors select their interventions. Clinical outcome research records a disappointing entry between no influence and weak influence. Of much greater importance are subjective personal experience, values and philosophy. Herein lies a potential conflict with purchasers' and clients' expectations of outcomes.

It can be interpreted from the data that practice is integrated with counsellors' sense of self but clients do not see this as necessarily benefiting them. Suggestions of reorienting practice to outcomes or research findings are often received as a threatening prospect and a personal criticism. This might be seen as an inflexible position for counselling that seeks to facilitate flexibility towards change in its clients. These are clearly risks for counselling that delivers a particular orientation, with the best of intentions, whether or not clients are helped.

It is possible that, for its survival as an important component of alcohol and drug treatment, counselling needs to be enriched by research. Resistance may erode counselling's integrity. The signs are there.

WORKING WITH LGBT CLIENTS & STAFF

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Introduction

This paper outlines the key points from a survey of the alcohol and drug treatment workforce in Christchurch and Hanmer Springs conducted in November 2000.

During 2000 the authors received reports from three LGBT (lesbian, gay, bisexual, transgender) clients about their perception of negative attitudes toward them and LGBT lifestyles, by staff and clients at treatment services. The survey was developed with the aim of raising the awareness of LGBT issues among the alcohol and drug treatment workforce.

Methodology

Bundles of the survey were sent to the managers of the alcohol and drug treatment agencies in Christchurch and to Queen Mary Hospital for distribution to all agency staff. Seventy-eight treatment workers responded to the survey. Of these 45 indicated that they were clinical staff. This represents an approximate response rate of 50% as it is estimated that there were 90 eligible clinical workers at the time the survey was conducted.

The survey contained questions to generate quantitative and qualitative data relating to agency policy, screening, resources, practice improvement and comfort re working with LGBT. The data were entered into SPSS and chi square analyses were conducted on all categorical data. Qualitative data was discriminately ranked and treated as categorical data for analysis.

Results

Significant results of the survey are reported in four sections as follows:

Demographics

The survey participants were largely an older workforce with only 27% aged between 18 and 35 years. There was an even gender distribution (51% women vs 49% men), 10%

were Māori and non-LGBT comprised 86% of the sample. 58% were clinical staff, 40% worked in a Statutory Outpatient service and 31% in a residential service.

The majority of respondents said that their agency was either 'mostly' or 'fully' welcoming of LGBT clients and supportive of LGBT staff (86% and 84% respectively) and almost all (96%) stated that they were comfortable working with both LGBT clients and staff

Policy

Only thirty-six percent stated that their agency had a policy in regard to working with LGBT clients. When asked to identify what their agencies policy was, the majority of those who offered an answer referred to legislation e.g. the Homosexual Law Reform Bill 1986; the Human Rights Act 1990 and the Defacto and Property Relationships Act 2001. None indicated specific agency policies or listed the Health and Disabilities Regulations 1996, which directly refer to consumers equal rights. Negative comments included "avoid them".

Screening

31% of the participants said that their agency screens for LGBT. Those who answered affirmatively were more likely to be men than women (32% vs 21%) and clinical staff than non-clinical staff (45% vs 11%). In response to the question "how is this information included in treatment plans?" three themes were predominant i.e. 'unsure'; 'seldom recorded' and 'recorded if clients disclose'.

Practice

Responses to the question "what would improve your practice with LGBT clients?" were categorised as either positive responses (47%) e.g. education, training, resources, support, awareness, or negative responses (53%) e.g. don't know, not seen as a need. Analysis in regard to age showed that the 18-35 year-olds gave the most positive responses (60%), the 36 – 45 year olds were evenly divided (47% positive), and the 46 year olds and over gave significantly negative responses (23% positive).

Sixty-nine per cent indicated that they would like more resources developed. This included all of the LGBT workforce, 81% of the Statutory Outpatient workforce and 65% of the residential treatment workforce. However, when asked what resources they would like to see developed, 65% of the sample then stated that they either did not want more resources or that they did not know. Further analysis of this group (i.e. the 65% who either didn't want more resources or didn't know what they wanted) showed that they were more likely (i.e. 70%) to be included in the group that stated that their agency did not screen for LGBT. Some negative comments in relation to resources included: "a desert island", and "how do you think heterosexual clients would feel with openly LGBT staff?"

Summary

In summary the 78 survey participants were of even gender distribution and were predominantly aged over 35 years.

Although over 84% of participants rated themselves as being welcoming of and comfortable working with LGBT clients and staff, the results of the survey highlighted a contradiction between this rating and the participants actual clinical practice. For example the results indicated that:

- a. a lack of clarity exists in regard to policy existence;

- b. a lack of screening for LGBT and subsequent lack of awareness of sexual orientation and appropriate support services in the treatment process;
- c. only a minority could state what appropriate resources were available in the community to support LGBT clients, most either didn't want resources developed or couldn't identify what resources they wanted, when asked what they wanted, and over half did not think anything was needed to improve their practice.

Treatment Implications

In order for safe and appropriate practice in regard to working with LGBT clients in Alcohol and Drug Treatment Agencies, the authors recommend the following:

1. Policies and standards in regard to working with LGBT clients be developed;
2. Specific questions in regard to sexual orientation be included in both screening/assessment tools and treatment plans;
3. An accessible resource base around staff education and raising awareness of LGBT issues be developed, acknowledged and maintained.

THE NATURALISTIC TREATMENT OUTCOME PROJECT (NTOPT)

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The three aims of this study are:

1. To describe the type and range of clients presenting at outpatient services in NZ
2. To measure a multi-dimensional outcome for a representative outpatient sample
3. To identify clinical predictors (client and treatment variables) of treatment outcome

It is intended to recruit a random sample of 120 clients from three outpatient services, two in Christchurch and one in Hamilton. The only exclusions are aged less than 17 years and living more than approximately 30 minutes drive from the city limits. Participants are confidentially and anonymously interviewed at baseline and again nine months following their initial clinical assessment. Six-month drug use profile is verified using a "collateral check".

A wide range of validated measures have been employed. Diagnostic information is gathered using the Composite International Diagnostic Interview (CIDI), supplemented by the conduct disorder and ASPD section of the Diagnostic Interview for Genetic Studies (DIGS). A profile of the past six-month's alcohol and drug use is gathered using the Timeline Followback procedure. A range of demographic and treatment utilisation data is being gathered using a questionnaire constructed for the study. Information gained includes treatment goals and reasons for seeking treatment.

Data from the first 80 baseline interviews are now available. The recruitment rate was 27%, however when comparing those interviewed with those who were not, it was found that there were no gender or ethnicity differences. Those recruited were on average three years younger. Differences in motivation to seek treatment were also examined. Of the 7 categories only two were different, so that those declining were less likely to be seeking treatment because their "family or friends wanted them to".

Demographically 67.5% were male with a mean age of 35.3 years (sd 12.7, range 17-77). The sample identified their "main ethnicity" as follows: NZ European 78.8%, Māori 10.0%, Other European 7.5%, Asian 2.5%, Pacific Island 1.3%. In total 18.8% identified as being of Māori descent. Relationship status: Married 13.8%, De facto 13.8%. Sexual orientation: Heterosexual 91.3%, Gay 2.5%, Bisexual 6.3%. Employment: Full-time 12.5%, Part-time 11.3%, with 56.3% employed in past 12 months.

Children: 46 (57.5%) clients have 106 children (mean 2.3), 32 clients have 62 children aged less than 16 years, 30 clients are contributing financially to 53 of these children, 16 clients have 23 of these children living with them, while in total 24 clients have 40 children aged less than 16 living with them.

The five most common current drug dependence diagnoses were: Alcohol (35.0%), Cannabis (28.8%), Amphetamines (10.0%), Opioids (8.8%) and Sedatives (8.8%). ASPD was diagnosed as current for 18.8% of the sample. A current anxiety disorder was present in 56.3% of the sample, most notably Social Phobia (30.0%), PTSD (21.3%) and Simple Phobias (21.3%). 53.8% for the sample had a current mood disorder. Combining mood, anxiety and eating disorders, a total of 68.8% of the sample were diagnosed with a comorbid Axis I disorder.

Reason for seeking treatment was canvassed, with 86.3% endorsing the option "because I wanted to", followed by family (38.8%), doctor (31.5%), partner (22.5%), another service (usually mental health) (22.5%), justice (15.0%) and friends (13.8%). Examining those who did not endorse the "because I wanted to" option only one of these endorsed the "justice system wanted me to" option, with doctor referral/encouragement the only motivating factor over-represented in those not wanting to attend for treatment.

Participants identified their treatment goal over the coming six months for all drug categories as no change, cut down a little, cut down a lot, stop completely and not applicable. For all substances stop completely was the most popular option. Alcohol and cannabis were the only drug groups with a significant proportion in the two reduction categories. Given that these were the two most commonly used substances they were examined further to compare participants based on treatment goal. For alcohol those who chose to reduce a lot or stop completely were significantly higher than those who chose no change or to reduce a little on percentage dependent, number of drinking days and amount consumed per day. For cannabis those aiming to stop completely were significantly higher on these three variables than were those choosing the non-abstinent goals. Unlike alcohol there did seem to be a concerning level of use by those aiming for little or no change with these participants reporting that in the past six months they had smoked approximately two joints per day, three to four days per week.

In conclusion the study to date has found low employment rates, marked disruption of the family unit, a wide range of drug dependence, and psychiatric comorbidity appears to be the rule, not the exception. These factors all highlight the importance of comprehensive assessment and management planning. Most clients want to be in treatment, most clients are abstinence oriented, although many are not, and treatment goals appear to be related to presence of dependence and extent of use.

PSYCHEDELIC EFFECTS AND PSYCHOSIS ASSOCIATED WITH KETAMINE --- TWO CASE REPORTS

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Ketamine is a dissociative anaesthetic used primarily for veterinary purposes. It is a non-competitive N-methyl-D-aspartic acid (NMDA), (an important excitatory neurotransmitter) receptor antagonist with prominent psychoactive effects in humans. It is commonly injected intramuscularly but can also be taken orally and nasal-pharyngeally. Chemically, it is an aricyclohexamine compound, similar to phencyclidine (PCP). But unlike PCP, which often produces violent, erratic, pain tolerance and ataxic symptoms, the effects of Ketamine has been described to be relatively mild and safe.

Synthesized in 1962 and first used in humans in 1970, abuse of Ketamine has been described in the eighties in developed countries. However, dependence on the substance was described only much later. The substance has been increasingly abused in many countries, initially by selected communities eg veterinary workers, and gradually making its presence in the street drug scenes. It is commonly known as K, Vitamin K, or super K. Excerpts of two case reports follow.

Case Report 1

Mr A, business man in his mid-thirties, referred by his general practitioner for treatment of his Ketamine abuse, came from a family and subculture where multi-substance drug use was pervasive. He had history of extensive use of Ecstasy, inhalant, benzodiazepines, marijuana, heroin and alcohol; and compulsive sexual activities. Five months prior to consultation he started snorting and "chasing after" Ketamine, to the point of developing epistaxis, with concomitant use of alcohol, benzodiazepines and marijuana; and promptly increasing consumption up to 3-4 g per day. Two months prior to consultation he ceased using all other drugs and was dependent solely on Ketamine.

With Ketamine his experience included an immediate slowing effect followed by a sense of happiness, confidence and relaxation. Clarity of thoughts allowed him to plan business expansion. The initial euphoric effect, which lasted about half an hour, waned with escalating use and the placid effect progressively shortened. Auditory hallucinations of a hostile god condemning him to hell and making other unpleasant commentaries soon emerged, along with paranoid ideation, usually in relation to intoxication and lasting sometimes for days. Attempts to stop Ketamine were thwarted by withdrawal symptoms of chills, autonomic arousal, lacrimation, restlessness, nightmares and psychological cravings. These symptoms drove him to seek further drug sources, and sent him desperately around looking for a cure. Unable to stop its use, he came intermittently for follow-up when the psychotic symptoms became intolerable or when he perceived getting into trouble with the law. Eventually he elected for inpatient withdrawal of Ketamine. During the brief stay of two days, the psychotic symptoms resolved quickly with

Lorazepam 3mg/day, Propranolol 40 mg/day, Diazepam 10mg nocte and Naltrexone 50mg/day. He defaulted follow up thereafter.

Case Report 2:

Mr B, early thirties, self-employed, with a background history of benzodiazepines, cough mixture, Ecstasy, alcohol, marijuana abuse; and problem gambling, presented with a four month history of Ketamine use and multiple unsuccessful attempts to quit. He had used Ketamine to cope with long standing family conflict, chronic low self-esteem, unresolved grief over multiple childhood losses; and to enhance his enjoyment of techno-pop music and food. Peer encouragement contributed to quick escalating use of up to 4g/day, and an expenditure up to two to three thousand dollars a month on the drug. Soon, olfactory and auditory hallucinations, which were poorly defined initially but became clearer with progressive abuse emerged. The latter took the form of demon's voice communicating with him, commanding and controlling him by making his ear move. During intoxication, he felt invincible and would experience his soul leaving the body, sometimes unable to re-enter the body again. He described feeling himself becoming a cartoon character, walking like a crab. The aftermath of the intoxication was occasionally amnesic, often accompanied by dysphoria and a deep sense of guilt and frustration. Visual, olfactory and tactile hallucinations would appear one or two days following abstinence, and promptly relieved by Ketamine. In between doses, he resorted to alcohol and benzodiazepines to calm himself. He was arrested by the police for exhibiting abnormal talk and behaviour in public. While admitted, he became increasingly restless, disturbed, delusional and paranoid against family and staff to the extent of absconding from the hospital. He reported people trying to catch his souls, intermittent visual and auditory hallucinations which seemingly lasted for months. The acute psychotic episode actually lasted six days and resolved with a short course of Haloperidol up to 4.5 mg /day. Subsequently, he underwent a drug rehabilitation program but despite a promising start, defaulted after three months.

Discussion

Both Ketamine abusers share similar demographic and background characteristics and present with a range of symptoms typical of an average ketamine abuser. Rapid tolerance development leading to escalating use suggests Ketamine to be of high addictive potential. Its short half-life of seventeen minutes and fast clearance from urine in two hours make detection a near impossibility if history of misuse is not forthcoming. Therefore, both a high index of suspicion and corroborative history are essential to improve detection rate during initial assessment. Similarly, its psychedelic effects are generally short-lived. Nevertheless, the emergence of psychotic symptoms and the distress associated with withdrawal may prompt them to seek help. The psychotic symptoms experienced by both persons appeared to be related to intoxication, and possibly withdrawal of the drug; and are likely to be dose related as well.

Conclusion

Ketamine, an emerging potential drug of abuse, has multiple receptor actions contributing to its wide-ranging psychedelic effects and psychotic symptoms. Interactions of these neuro-physio-chemical mechanisms remain largely unknown. Clinically, given a history of a multi-substance abuse with acute presentation of multi-modal hallucinations and psychotic experiences, a high index of suspicion should be aroused to consider Ketamine abuse as a possible cause.

A QUALITATIVE INVESTIGATION OF GAMBLING AMONGST A SAMOAN POPULATION IN AUCKLAND

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During the last decade the role of gambling in New Zealand has changed dramatically, with an unprecedented expansion of legalized gambling. Research has shown that the availability of, and expenditure in, gambling in New Zealand has increased since 1991, due to the introduction of new forms of gambling such as casinos, and increased availability of gaming machines outside of casinos (Abbott & Volberg, 1999). Associated with this phenomenon is an increase in the prevalence of problem and pathological gambling among the Pacific peoples of New Zealand. Abbott and Volberg (1991) have identified higher rates of excessive gambling amongst Pacific people (six times the Pakeha rate) and Māori (over three times the Pakeha rate).

As a percentage of the total Pacific peoples gambling population in New Zealand, 16% are reported as being problem gamblers and 15% as pathological gamblers, unfavourably compared with European (3% and 2% respectively), Māori (9% and 7% respectively) and Asian (10% and 1% respectively) (Abbott & Volberg, 1991; Brown, 1996). Pacific people involved in gambling (1997), are reported to have spent approximately \$13,468 per person per annum; much higher in amount than for European/Pakeha (\$1,761 p.a.), Māori (\$1,908 p.a.) and Asian (\$2,829 p.a.) (Australian Institute for Gambling Research, 1998). Alarming, a low level of presentation to help services is reported for Pacific peoples. According to the Problem Gambling Committee (1998), presenting for help remains low for Pacific peoples (5.2% of clients and 3.8% of the Pacific population, respectively). The Problem Gambling Foundation of New Zealand report that only 4.8% of the Pacific peoples

gambling population presented to their help service. This was well below expected numbers, based on their being at high risk for gambling problems (Problem Gambling Committee's National Statistics, 1998; The Compulsive Gambling Society of New Zealand 1998-1999 Clinical Report).

While several studies on problem and pathological gambling acknowledge a high representation of Pacific peoples within New Zealand at risk of this type of behaviour (Abbott & Volberg, 1991, 1999; Brown, 1996), there is no ethnic specific information for each Pacific group. The focus of this research is on Samoan people involved in gambling. It is likely that due to the high percentage of Samoans amongst the Pacific population in New Zealand there is a high representation of Samoans in the negative gambling statistics on Pacific people in New Zealand.

This research is a qualitative approach to the investigation of Samoan gambling in Auckland, by gathering lifestory interview data and analyzing it to highlight the conditions and processes within which gambling is embedded and constituted. It qualitatively investigates gambling amongst a Samoan population in Auckland in order to provide a greater depth of understanding and awareness of the impact of gambling in the Samoan community in Auckland. A life-story interview approach, thorough investigation and in-depth analysis of this provides crucial information for Public Health strategies and regulations required for the Pacific Peoples of New Zealand and gambling. It also contributes useful information for both treatment and prevention programmes, and encourages further investigation amongst the Samoan gambling population and other Pacific communities.

Gambling participation has negatively impacted on Samoan individuals, families and communities, especially in the areas of health (physical, psychological, spiritual), employment and finance. A comparative gender analysis identifies differences in the types of preferred gambling activities for males and females, and reasons for participating. Gambling is a coping strategy for many of life's problems, with most males reporting external problems such as lack of finances, and females internal problems such as stress and pressure. Many of these perceptions relate to Samoan gender-role socialisation and expectations, which can be perceived to create conditions conducive to gambling behaviour (Perese, 2000).

Gambling participation also influences the breakdown of familial relationships, causing conflict between partners and compromising the well-being of children. Losing money to gambling results in increased financial pressure amongst partners, and an inability for families to contribute to *fa'alavelave* (traditional customary obligations). This can cause arguments between partners, and sometimes inadequate provision of basic necessities for children, who are also subject to physical aggression and neglect due to parental gambling involvement.

Gambling can also be an alternative means of acquiring necessary additional finances required to provide for families and to fulfill *fa'alavelave* and church obligations; two complex and deeply embedded cultural customs unique to *fa'aSamoa* (Samoan way of life). The lack of participation in such due to gambling impacts on an interconnected community dependent on these commitments, and also the individual who feels a sense of shame and thus isolation because they cannot fulfill their obligations (Niumata, 2000).

Problem gambling in a Samoan context was understood on the basis of two overarching themes 1) the loss of discretionary money in addition to finances allocated for bills, savings and familial obligations, and 2) spending time away from children, family and community. The increased accessibility, availability and acceptability of gambling behaviour upon migration to New Zealand were factors attributed to the perceived high numbers of Samoan gamblers in Auckland.

Recommendations from these impacts are suggested as follows:

1. Research is necessary to examine gambling in a broader context within the Pacific community, and to investigate appropriate prevention, treatment and intervention of gambling for Pacific people.
2. Pacific people require appropriate “awareness raising” strategies and promotion through the use of appropriate Pacific specific consumer information and resources to increase informed consent and understanding of the negative impacts of gambling behaviour amongst Pacific people.
3. Pacific people require targeted information in each Pacific language entailing the provision of increased reference points for informed consent from gaming venues, television, advertising and mass media.
4. The development of a Pacific peoples’ advisory group to 1) design appropriate strategies, 2) develop an appropriate gambling service for Pacific people, incorporating sectors specific to:
 - ✂ Research for Pacific people.
 - ✂ Intervention and treatment appropriate for Pacific people.
 - ✂ Development, production and distribution of resources and information for Pacific peoples.

GAMBLING PROBLEMS AMONGST NEW ZEALAND HIGH SCHOOL STUDENTS: IS IT A HIDDEN CURRICULUM?

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Alcohol use and misuse amongst adolescents is commonly researched and reported. Little research has been conducted in Australasia for gambling and gambling misuse, despite the high comorbidity in adults. Internationally, research indicates that teenagers may be four or more times at-risk for gambling problems as adults are (Derevensky 2000) while other findings report youth being five times at-risk of adults (Shaffer et al 1997). Gupta (2000) found 4%-8% of youth in North America had 'very serious gambling related problems' while a further 10%-15% were at risk for them. Several environmental factors suggest young New Zealanders may be similar or greater risk for gambling problems. These include easier access through absence of or poorly enforced regulation around gambling, the difficulty of age enforcement of new electronic gambling such as 0900 numbers and Internet gambling, and a culture of gambling represented by the adage for New Zealanders liking 'rugby, racing and beer'.

A prospective study of six High Schools in the Auckland area looked at gambling participation and problem gambling amongst 13-18 year-old students, with variables including ethnicity, socio-economic status, gender and belief around skill in gambling. Ethics approval allowed dispensing with signed consent of parents but required consent of the student, the headmaster and the Board of Trustees. Two schools were selected from each of low, middle and high decile schools as a measure of socio-economic status. Students completed a questionnaire around demographics, gambling, video game playing (not reported here) and three gambling screens. 568 responses were received of which 21 were discarded, mostly due to incomplete or multiple answers. Of 525 responses around gambling, 35% of students had played Lotto in the previous 12 months (compared with 75% adults; DIA 2001), 35% had played Instant Kiwi (48% adults), 7% Daily Keno (6% adults), 13% Telebingo (20% adults) while 32% of students under 16 years of age had played Instant Kiwi which has an age restriction of 16 years. Twenty-four per cent of students had played cards for money in the previous 12 months (compared with 5% adults), 7% had gambled using 0900 numbers (3% adults), 17% gambled on sports events (8% adults, however question restricted to TAB), 7% on track gambling (17% adults), 4% on Internet gambling (1% adults) and 5.5% casino gambling (16% adults). Ten per cent of students had played gambling machines in the previous 12 months compared with 18% of adults. In the case of track, sports (through TAB), casino and gambling machines, age restrictions existed of either 18 or 20 years of age while students were under this age. Of 525 students who completed screens, 21.9% were positive on the Eight Screen – Youth Version (n=115), 20.9% were positive on the SOGS-RA (n=110) and 10.9% (n=57) were positive on the conservative DSM-JR screen. High screen positives were found amongst Māori students (Eight Screen 26% positive; SOGS 22%; DSM 16%), Pacific Peoples (Eight 39%; SOGS 30%; DSM 21%), Chinese (Chinese/Korean/Japanese)

(Eight 24%; SOGS 31%; DSM 10%) and Indian (Eight 17%; SOGS 33%; DSM 17%). New Zealand European scored lowest screen positives (Eight 10%; SOGS 10%; DSM 5%) but at rates which exceeded those of North America (DSM-J 3.4% & SOGS-RA 5.3% - Derevensky & Gupta 2000). Gender differences for screen positives was not as marked as expected (Eight Screen: females 19% males 24%; SOGS: females 16% males 24%; DSM: females 7% males 15%). Those students in lower decile schools scored higher screen positives (screen range 37%-19%) compared with mid-decile schools (range 16%-10%) or high decile schools (11%-5%). There was a strong ethnic factor in the different decile levels which contributed to the differential findings. Although the survey was not intended to estimate the prevalence of problem gambling in youth (generalisation problems and sample size would mitigate against this) some indication could be obtained by adjusting the screen findings by allowing for the high ethnic factor in positive responses. Pacific Peoples and Chinese were over-sampled while Māori were under-sampled in the randomised selection process from an area (Auckland) where the over-sampled ethnic groups were concentrated. Adjusting using a relatively similar national cohort ethnic breakdown (Census 2000) screen positives for the adolescent sample was adjusted to a range of 16.7% to 7%. This still exceeds the estimate of Gupta (2000; 4%-8%).

Findings concluded that gambling for money is a common event amongst New Zealand High School students and possibly even higher amongst other adolescents who are employed, that control of age restrictions appears to be largely ineffectual, and that problem gambling is high amongst this group and particularly amongst lower socio-economic groups and non-New Zealand Europeans. The findings that the very high findings of North America may be considerably exceeded in New Zealand youth suggests there is a need for further research and interventions amongst this at-risk group.

NON-ACUTE CANNABIS USE AND COGNITION: A REVIEW OF THE LITERATURE

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Search Process

The search was initiated using PsycINFO and Medline databases. Once the articles from the initial search results were read, additional studies were noted in the reference sections and obtained for reading. Review articles of the area of interest were also read to assure that all relevant studies were located.

Preliminary Impressions

The literature on acute effects (i.e. effects within 0-12 hours of consumption) of cannabis exceeds that on nonacute effects (i.e. 12+ hours after consumption). In the nonacute effects literature there was a burst of activity in the early 1970s and again in the early to mid 1990s. Studies developed in sophistication after 1990. As neuropsychological testing becomes more sensitive and complex more subtle long-term effects of cannabis are being found. With sensitivity in testing, Solowij's (1998) summation of cannabis and cognition holds – that heavy use of cannabis over a long period has subtle effects on higher cognitive functions (attention and executive functioning).

Yesavage and colleagues are the only ones to have conclusively shown nonacute effects beyond 12 hours. Unfortunately, while cognitive, their measure is a flight simulator and their data is difficult to compare with other studies.

Methodological Problems

A number of researchers have published articles which appear to tap different facets of cognition but are in fact from the same population or tests re-analysed. In addition, a lot of studies fail to fully report their methodology. Studies in *The Pharmacology of Marijuana* (1976) appear well conducted, but often fail to clarify if subjects were intoxicated during testing.

Poor methodology is a major problem in this area. Controls, when matched at all, are often matched very generally and on superficial factors, such as age or gender. Frequently psychiatric functioning is not covered, control of other drugs is missing and there is no measure of premorbid functioning. As Carlin & Trupin (1977) point out, while

Campbell et al (1971), Kolansky & Moore (1971), Mendelson & Meyer (1972), Grant et al (1973) and Rubin et al (1973) all had significant results they either used a psychiatric population, did not control for other drugs, did not compare users with nonusers or did not control for neuropsychological indicators.

Summary Of Findings

- Most of the studies employed cannabis users who were smoking daily or at least 4 times a week and had been doing so for several years.
- Frequently the populations employed were male and/or college students, which would raise some issues of generalisability, especially as Pope et al (1997) have shown sex specific differences in long term effects of cannabis. 38 studies were population based (26 with matched controls) and 14 were experimental.
- Often when other drug use was covered it was only in a recent context and did not discuss lifetime rates of use. Alcohol was the biggest confounder. Of the 51 studies only 14 clearly excluded subjects who had used other drugs.
- A number of studies conducted in the 1970s were experimental, but sometimes made it difficult to tell if the subjects were sober when tested. Some of these experiments did employ designs that incorporated non-smoking days for cognitive testing and these studies contained useful detail of the amount of cannabis being smoked by subjects prior to testing. Of 51 studies 20 employed some form of abstinence prior to testing. Only a few studies reported abstinence that was based on self-report from subjects.
- 28 of 51 studies employed screening of neurological/psychiatric/medical disorders and excluded subjects that had some form of dysfunction. Many studies did not measure or report psychiatric functioning.
- Pre-morbid functioning would be the factor most absent in this area of research. Only 1 study (Block et al, 1990) had a measure of pre-cannabis use cognitive functioning (school tests from age 10 years). Of 51 studies 21 had some measure of premorbid functioning, though they could not say whether it was pre-cannabis use. Many studies simply noted the highest (or current) level of education.
- There was a surprising and refreshing width of cultures involved in testing. As usual the majority of studies were done in the US, but other populations studied included Jamaica, Costa Rica, India, Canada, Egypt, Spain, Australia, Greece, and Germany. Interestingly there were no studies from the UK.

Conclusions

Unfortunately there is a lack of uniformity in the tests adopted in the studies reviewed. The 12 studies with no methodological flaws that yielded significant results employed tests of attention, memory and executive functioning.

Specifically the 12 studies had significant results on: speed, Trail Making, verbal memory, selective attention, filtering information, evaluating stimulus, mental flexibility, attention, executive functioning, factual performance, verbal scale, comprehension, digit symbol substitution, short-term auditory memory, short-term visual memory, expression test, chronic memory, verbal selective remembering, divided attention, short-term memory.

The results of the research on the cognitive effects of nonacute cannabis are summarised well by Solowij (1998), "long-term cannabis use does not have a severe debilitating impairment on cognitive function...it does lead to subtle selective impairment...Primarily cannabis compromises the ability to focus, sustain and shift attention...Changes are probably reversible, though not perhaps entirely or for everyone."

Clinical Implications

- The findings of subtle impairment may have more significance for adolescents who are in an accelerated phase of life in terms of developing cognitive abilities and expanding their knowledge base through education.
- The research indicates that increased duration of use leads to progressively greater impairment. Thus, clients who continue to abuse cannabis over lengthy periods increase the chance that they will have residual, and perhaps irreversible, cognitive damage from cannabis.
- Finally, in terms of effecting client functioning and endangering themselves and others, the effects on attention are of concern. Impairments of attention relate to problems with distractibility, which in turn has significance for clients driving or operating

PERSISTENCE OF HAZARDOUS DRINKING AMONG TERTIARY STUDENTS

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Many of the health problems experienced by young people are the result of, or are exacerbated by, hazardous drinking (HD) i.e. drinking that confers the risk of dysfunction or harmful consequences. New Zealand epidemiological evidence shows that in the last decade, the frequency of heavy episodic drinking among young people has increased (Field & Casswell, 1999).

The Early Intervention Project was initiated in 1999 with the primary objective of developing interventions to reduce hazardous drinking among young people. The first phases of the project focus on tertiary students, who constitute a subgroup of youth renowned for their drinking exploits. Although there are numerous reports in the overseas research literature on college student drinking, there is little information on this phenomenon in New Zealand. The objective of the present study was to learn about student drinking at a New Zealand university for the purpose of developing an intervention to reduce alcohol related harm.

Aims

- Determine the prevalence of HD and other substance use among university students
- Examine the persistence of HD
- Identify risk factors for persistent hazardous drinking.

Methods

The study sample consisted of 1,480 students living in 12 halls of residence of the University of Otago, Otago Polytechnic, and Dunedin College of Education, who provided complete *core data* (specified below) in their response to an anonymous six-page questionnaire administered during the first two weeks of the academic year (Time 1). Prevalence estimates are based on this sample.

Six months later, 922 (62%) of the Time 1 study sample provided complete core data in a survey with similar content. Analysis of persistent hazardous drinking is based on this subsample.

Measures

- Demographic characteristics: gender, age, ethnicity
- Mental well-being: items from the Medical Outcomes Study Short Form-36
- Closeness to family: a 7-point Likert-type scale

- Quantity and frequency of drinking in the preceding four weeks
- Drinking hazards: a five-item checklist
- Alcohol Use Disorders Identification Test (AUDIT)
- Lifetime and four-week incidences of cannabis use and other illicit drug use.
- Smoking status

Core data consisted of all 10 AUDIT items, gender, and whether the respondent had consumed any alcohol in the preceding four weeks. A measure of the drinking norm for each hall of residence was computed by taking the mean of the number of drinks consumed on a typical occasion by each resident. Persistent hazardous drinking was classified as an AUDIT score ≥ 8 at both surveys. This measure served as a binary dependent variable in multivariate logistic models.

Analysis

Independent variables used in regression analyses were measured at Time 1. Adjustment was made for clustering on hall of residence, to reflect the method of sampling. This adjustment inflates the confidence intervals for odds ratios.

Results

PREVALENCE OF HD AND OTHER SUBSTANCE USE (TIME 1)

Coverage and response rates

The study sample of 1,480 constituted 65% of all students in the 12 halls of residence. Almost all students present at contact (96%) provided complete core data.

Demographic characteristics and generalizability of the findings

The mean age of participants was 18.3 years (SD=1.6) and 60.1% were female. This age and gender structure closely resembled that of the halls of residence population. The majority of respondents (72.3%) indicated they were of New Zealand European ethnicity. The remainder were Māori (3.9%), Pacific Islands People (1.8%), Asian (15.9%), European - other (3.7%), and Other (2.1%).

Hazardous drinking

At Time 1, 62.4% of males and 47.9% of females (Total = 53.7%) scored 8 or higher on the AUDIT, a score considered to be indicative of hazardous drinking.

Over a quarter (25.7%) of students reported an injury as a result of their drinking. A range of other alcohol related consequences was reported for the preceding three months: fights (10.2%), emotional outbursts (25.5%), unsafe sex (9.9%), and difficulty concentrating (14.5%). Drink-driving (in the past month) was reported by 10% of respondents.

Other substances

One in ten (9.9%) students reported that they were current smokers of tobacco; 13.8% reported recent (4 weeks) use of cannabis, and 4.3% said they had used another illicit substance in that time.

PERSISTENCE OF HAZARDOUS DRINKING (Time 1 and Time 2)

HD was found to persist across the academic year. One in two respondents (50.3%) scored ≥ 8 on the AUDIT at Time 1 and Time 2. Of the 160 respondents whose drinking status changed over time, the majority (N=110) transitioned to hazardous drinking.

Demographic risk factors for persistent HD included male gender and being under 20 years of age. Relative to Pakeha, Māori had higher risk of persistent HD, while Asians had markedly lower risk.

After adjustment for gender, age, and ethnicity, the following psychosocial risk factors were identified: being less close to family, current smoking, recent cannabis use, current use of other illicit substances, alcohol-related problems, and heavy episodic drinking by members of the student's hall of residence.

Take-home messages

- Hazardous drinking is widespread and highly persistent among students in the Dunedin halls of residence.
- Being male, of Māori ethnicity, being younger, less close to family, a smoker, a user of cannabis or another illicit substance, experiencing alcohol-related harm, and living in a hall with high levels of drinking, were all factors associated with persistent HD.
- In contrast with North American, European, and Australian student populations, which display considerable use of other drugs, this New Zealand population has comparatively low use of illicit substances but consumes larger quantities of alcohol. This population can therefore be considered a *test-bed* for studies of the independent effects of alcohol and the social influences on alcohol consumption.

THE USE OF THE TELEPHONE IN TREATING PEOPLE WITH ALCOHOL AND DRUG PROBLEMS: A REVIEW OF THE LITERATURE

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“Mr Watson, come here, I want to see you”. These are the famous first words communicated by telephone, uttered by the inventor Alexander Graham Bell to his assistant Thomas Watson on 10 March 1876. The telephone remains one of the great human inventions. Telephone counselling was a natural outcome of the community mental health movement of the 1960’s and 1970’s and has subsequently been used in various ways in the treatment of people with alcohol and drug problems.

A review of telephone counselling fifteen years ago (Hornblow 1986) found no evidence for primary prevention, promising applications for tertiary prevention and the most evidence for the effectiveness of telephone counselling in secondary prevention activities.

Since then, there have been six randomized controlled trials of the use of the telephone in assisting people with alcohol and drug problems; four in the nicotine area and two in the alcohol. There are none in the other drugs areas as seen in the Table below.

In summary, there have been no head-to-head studies of telephone treatment versus face to face clinical treatment. The positive studies have all been when telephone counselling was added to self-help in the context of a smoking telephone help line. Importantly, when telephone counselling was added to optimal clinical care for nicotine dependence, no additional benefit was gained for telephone counselling. Both of the randomized controlled trials of the use of telephone for alcohol problems were negative, although both were not without significant limitations.

In conclusion, telephone counselling has not been unequivocally shown to be effective for assisting people with alcohol and drug problems but there remains substantial indicative evidence of its use, particularly in secondary prevention services – telephone counselling help lines for smoking cessation especially. Telephone counselling is best suited for those: who wish to remain anonymous; who may wish to by-pass conventional services; who need help out of hours; and who need to feel an increased sense of control over the therapeutic process. On a more positive note, it is also likely to be suited to those who may wish to receive care and support in the comfort of their own home and at a time that is convenient to them. This is quite conceivably the way of the future and improved telephone technology is likely to increasingly make this a reality.

Published studies of the use of the telephone in managing drug and alcohol problems since 1985

Authors (year)	n	RCT	Recruitment Setting	Description	Demonstrated Effectiveness
Nicotine problems					
Zhu et al (1996)	3030	Yes	Telephone help line	Three-arm study; addition of one, or two or more telephone sessions to a self-help quit kit	Yes
Leed-Kelly et al (1996)	288	No	Six residential alcohol treatment programmes	Pre-post evaluation of up to 3 post-alcohol treatment telephone counselling sessions	Indicative
Reid et al (1999)	396	Yes	Specialist heart institute	Addition of followup telephone counselling to intensive clinical treatment	No
Lichtenstein et al (2000)	714	Yes	Electric company survey	Three-arm study; standard pamphlet vs customized pamphlet vs addition of one or two telephone calls	Indicative
Zhu et al (2000)	8832	No	Telephone help line	Addition of telephone counselling to NRT; comparison of those who chose further telephone sessions over those who did not	Indicative
Borland et al (2001)	998	Yes	Telephone help line	Two-arm study; addition of strategic telephone call back to normal quitline	Yes
Alcohol problems					
Fitzgerald et al (1985)	288	Yes	Two residential alcohol treatment programmes	Two-arm study; two-weekly pro-active telephone aftercare sessions vs none	No
Heather et al (1990)	107	Yes	Newspaper adver	Four-arm study; including comparison of posting telephone progress reports to a telephone answering machine vs interviewer	No

Other drug problems

There are no studies in the literature

METHADONE THERAPY FOR ADOLESCENTS WITH OPIOID DEPENDENCE

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Methadone maintenance therapy (MMT) for the treatment of opioid dependence has been well established in New Zealand for over two decades. Despite widespread awareness that opioid dependence often begins in teenage years and increasing numbers of adolescents presenting with severe opioid dependence, most treatment programmes offering MMT, limit treatment to those over the age of 18 years. Programmes may under exceptional circumstances offer treatment to people younger than this, but there are to our knowledge no programmes dedicated to delivering MMT while also meeting the special needs of adolescents. Furthermore, MMT for adolescents seems not only unpopular, but it appears to be actively discouraged (National Protocol for Methadone Treatment in New Zealand, MOH 1996) despite the lack of research into this form of treatment for what is an increasingly prevalent problem.

This paper presented outcome data on 16 consecutive adolescents treated with methadone for opioid dependence since 1996 at the Youth Speciality Services in Christchurch. Following a comprehensive assessment each subject was stabilised on a dose of up to 40mg methadone daily, then withdrawn from methadone over a three-month period before entering a residential treatment programme. As part of treatment, all subjects were offered psychosocial treatments, treatment for any mental health problems, and family, schooling, occupational and developmental issues were addressed. Each subject was administered the Methadone Treatment Index (Deering et al) at baseline and three-month follow-up to obtain measures of past months drug use on a range of drugs, social and behavioural functioning including risk taking behaviours, and general health.

Four of sixteen subjects failed to stabilise on methadone. Baseline and three-month follow-up data could be collected on eleven of twelve subjects. The average age of the sixteen subjects was 16.7 years, thirteen were female and three male, the average age of first intravenous use was 15.3 years and the mean age of onset of opioid dependence was 16.4 years. 67% were Caucasian, 27% were Māori and 7% were Pacific Peoples. Comorbid diagnoses included alcohol dependence (67%), cannabis dependence (47%), benzodiazepine dependence (20%), conduct disorder (64%), PTSD (14%), major depressive disorder (14%) and ADHD (7%). 57% tested positive for Hepatitis C at baseline, and none were HIV positive.

Comparisons of baseline and three-month follow-up data of the eleven subjects using a Wilcoxon signed rank test found significant reductions in overall drug use ($z = -2.934$, $p =$

.003), frequency of intravenous drug use ($z = -2.281, p = .005$) and risk taking behaviours ($z = -2.940, p = .003$). There were no significant reductions in overall social functioning or general health.

Of these eleven subjects, only one (8%) completed a residential treatment programme after detoxification. That subject remained abstinent from opioids. 92% of the group relapsed onto intravenous opiates, before they could complete a residential programme.

In conclusion, these results indicate that methadone treatment is associated with significant improvements in IV use, overall drug use and risk taking behaviours and the significant findings from such a small sample suggest that methadone treatment is a powerful intervention for most adolescents with opioid dependence. Furthermore, the high relapse rate upon detoxification and the failure of subjects to complete a residential programme suggest that current abstinence-based treatment programmes are not a viable treatment option for most people such as those in this sample. In many cases, methadone treatment should be maintained well beyond three months. Finally, the failure of four of the sixteen subjects (25%) to stabilize on a dose of methadone up to 40mg daily suggest that doses above 40-50mg daily may be needed to stabilize a minority of patients.

THE DEVELOPMENT OF A BRIEF DRUG USE OUTCOME MEASURE FOR USE WITHIN METHADONE TREATMENT PROGRAMMES

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Treatment objectives specified in the 2001 "draft" New Zealand Protocol for Methadone Treatment reflect a harm reduction approach and the multi-dimensional objectives of treatment. These include: improving health and personal and social role functioning; including minimising the negative impact of opioid dependence on children; reducing the spread of infectious diseases associated with injecting drug use; reducing episodes of misuse and relapse; reducing crime associated with drug use; and reducing mortality and morbidity.

Outcome measures for use within Methadone Treatment Programmes (MTPs) in New Zealand need to be congruent with these objectives. They also need to be:

- Meaningful and acceptable to clients and staff;
- Culturally acceptable;
- Brief and easy to incorporate into day to day practice;
- Meet adequate psychometric properties.

The Degree of Drug Use Index (DDI) is a brief measure of recent drug use within a prototype multi-dimensional outcome measure, the Methadone Treatment Index (MTI), designed for use by clinicians with their clients to monitor treatment progress. The DDI was developed in accordance with the primary goal of MTPs to reduce the harm associated with injecting and other drug use. The DDI asks questions about five drug-use types: injecting drug use; non-injecting drug use (sedatives, tranquilisers, hypnotics); cannabis; alcohol; any other non-injecting drug use not specified.

The current study was funded by the Health Research Council of New Zealand and undertaken by the NCTD in collaboration with the Canterbury District Health Board (CDHB) Alcohol and Drug Service. The Canterbury Ethics Committee approved the study. The primary goal of the study, which commenced in September 1999, was to recruit and collect information about recent drug use from a representative sample of 105 people undergoing methadone treatment (35 Māori and 70 non-Māori) at the Christchurch MTP.

Specific aims were

- To investigate the validity of the DDI in relation to the Opiate Treatment Index Drug Use Section (OTI-DUS), a longer, standardised Australian developed outcome measure for opiate treatment, against the "gold standard" of the Timeline Follow-back procedure (a valid and reliable intensive procedure for collecting drug use information using a calendar and cues such as important life events), using a collateral significant other check.
- To obtain participant views on usefulness and acceptability and their priority rating of drug-use types for reducing/ceasing use within a MTP.
- To investigate whether there were any differences between Māori and non-Māori – responses.

A nurse from the CDHB Alcohol and Drug Service approached potential MTP participants from two randomly selected lists of Māori and non-Māori clients. Clients who expressed interest in participating in the study and were willing for a significant other person to provide a collateral check in relation to their recent drug use, were contacted by a research team interviewer to gain informed consent. Participants were guaranteed anonymity and confidentiality in relation to their responses. Participants provided demographic and treatment-related information and information on their drug use history, health status (SF-36) and quality of life. The DDI and OTI- DUS were administered in random order followed by the TLFB.

Results for 33 Māori and 72 non-Māori participants are presented on reported drug use; correlations of the DDI with the OTI-DUS; the DDI with the TLFB and the OTI-DUS with the TLFB and; participant views. No significant differences were found between Māori and non-Māori participants on key demographic variables or responses. The mean age of participants was 35 years; 52% were male, 48% were female. Thirty one percent identified as Māori, 64% as New Zealand European Pakeha, two percent as Pacific Islands and two percent as other. Forty-five percent of participants reported being of Māori descent. Fifty-three per cent were single and just under a quarter (24%) were in defacto relationships. Fifty-five percent of participants had less than three years secondary schooling, 77% were unemployed and 23% received a Domestic Purposes Benefit, indicating full-time parenting responsibility. Seventy-five percent of participants had received methadone treatment for longer than two years, and 68% were receiving a daily methadone dose of 60mgms or more.

Intravenous use during the past month was reported by 28% of participants (24% reporting intravenous use of opioid drugs), with 13% reporting using more frequently than weekly. Cannabis use was reported by 77% of participants, with 56% reporting using more than weekly. Tranquiliser/hypnotic/sedative use was reported by 31% of participants (19% non-prescribed, 8% prescribed, 5% both prescribed & non-prescribed), with 20% reporting more than weekly use. Thirty-two percent of participants reported alcohol use during the past month, with one percent of women reporting drinking more than 14 standard drinks on average per week, and 5% of males reporting drinking more than 21 standard drinks on average, per week. Twelve percent of participants reported using amphetamines and one-percent hallucinogens during this period, 92% nicotine.

Correlations between the scores on the relevant DDI drug-use types and the OTI-DUS drug-use category totals were all highly significant ($p < 0.001$). Likewise, between the relevant DDI scores and the TLFB monthly totals.

The DDI was acceptable to participants and the average time for administration was one and a half minutes, compared with three minutes for the OTI-DUS. Participants rated intravenous drug use as the highest priority for reducing/ceasing drug use within a MTP; followed, in order, by tranquiliser/sedatives/hypnotics; other non-intravenous drug use not specified; alcohol, and cannabis. Māori participants rated alcohol and cannabis equally as the lowest priority.

Conclusions reached were that the DDI was a valid brief measure of treatment outcome, acceptable to both Māori and non-Māori participants and that the DDI is an option for including in a portfolio of brief outcome measures for use within MTPs. A follow-up interview will include minor amendments to the DDI based on participant feedback, highlighting the importance of consumer involvement in the development of outcome measures.

REVIEW OF A COMMUNITY APPROACH TO METHADONE TREATMENT USING GENERAL PRACTITIONERS

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At the present time the 'National Protocol for Methadone Treatment in New Zealand' is under review and there is a strong move towards gazetting more GPs and transferring clients away from specialist methadone treatment services and out to these GPs for ongoing methadone maintenance treatment (MMT). There is considerable concern about this move in specialist methadone treatment services, including the Auckland service.

The GP authorisation scheme is a service option offered to stable MMT clients, where an authorised GP becomes the case-manager and methadone prescriber for the individual client. This option is in line with the service philosophy of normalisation. The decision to transfer a client to the care of his/her GP is made by the client, case-manager and service Medical Officer, after consideration of several factors including:

- ◆ Is the client stable on methadone?
- ◆ Has the client a long-term relationship with the GP?
- ◆ Is the GP willing to take on prescribing MMT for the client?
- ◆ Is the client seeing their GP regularly for other health issues?

There is a wide variation in the percentage of clients under GP authorisation from MMT programmes in New Zealand as seen in the following data (personal communications):

Auckland	30.4
Tauranga	29.8
Timaru	28.4
Wellington	26.3
New Plymouth	25.0
Greymouth	24.4
Christchurch	23.0
Nelson	14.9
Dunedin	13.0
Wanganui	12.8
Napier	12.7
Gisborne	10.0
Thames	4.8
Southland	4.4
Hamilton	2.8

In the Auckland Regional Methadone Service (ARMS) 265 clients of 864 are managed by GPs under authorisation from the service. A survey questionnaire was sent to 35 of these

GPs and 27 returned it. The questionnaire asked specific and general questions about the GP authorisation service.

Findings

1. Most GPs reported that they are now the primary health care providers for their MMT clients, although this was not always the case.
2. GPs appear to now be accessing the specialist type services offered by ARMS more often than in the past. Most common services mentioned by GPs were:
 - ◆ Restabilisation of clients
 - ◆ ADAPT and pregnancy
 - ◆ Liaison co-ordinator
 - ◆ GP liaison co-ordinator
 - ◆ Holiday and travel arrangements
 - ◆ Urgent specialist clinical advice
 - ◆ Advice re dose increases and detoxing
 - ◆ General backup support
3. All felt very supported by ARMS and RADS
4. Most GPs surveyed felt strongly that there was a reluctance among GPs to provide MMT. The most commonly reported reasons were:
 - ◆ Lack of additional funding from health service funders.
 - ◆ Perceived problems of 'drug addicts'
 - ◆ Attraction of 'drug seekers' to their practice.
 - ◆ Manipulation and deception
 - ◆ Dirty and unkempt presentation of clients
 - ◆ Exposure to Hep B, Hep C, HIV etc
 - ◆ Time consuming
 - ◆ Inability to pay for consultations
 - ◆ Extremely demanding – always have problems
 - ◆ Shortage of locums willing to cover MMT clients
 - ◆ Clients have chaotic lifestyles
 - ◆ Little rewards
 - ◆ Personal responsibility

Conclusions

We feel strongly that our specialist gazetted services offer total support to our authorised GPs. GPs are providing a specialist type treatment, but are totally supported by the service and protocols at all times. An authorised GP is not bound to continue providing treatment at any time, if he/she feels uncomfortable with the treatment or perhaps an individual client, they have the back up of knowing that the authorising service will pick up the MMT of any client/s.

A gazetted GP does not have this support. Reality is that service funding can only be spread so far. Who can a gazetted GP refer back a non-paying client to? Would it be ethical to refuse ongoing treatment because of the client's inability to pay? What choices does a gazetted MMT provider have? Our services need authorised GPs to take the stabilised clients in order to make places available for new clients – as a community service we are there to support these GPs.

FUTURE COSTS OF HEPATITIS C AMONG INJECTING DRUG USERS IN NEW ZEALAND.

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It has been estimated that there are 25,200 people infected with the hepatitis C virus (HCV) in New Zealand, with approximately 25 new infections per week (Nesdale, Baker, Gane et al, 2000). This virus is endemic among injecting drug users with an estimated 84% of methadone clients being sero-positive for HCV (Chetwynd, Brunton, Blank et.al, 1995; Carter, Robinson, Hanlon, 2001).

HCV and its sequelae impose a substantial cost that will be funded by New Zealanders in future. HCV is a slowly developing disease, with a proportion progressing to more severe liver disease including liver cirrhosis and hepatocellular carcinoma.

Recent advances have been made in the treatment of HCV leading to the introduction of combination therapy which is now the recommended treatment for HCV (Davis, Esteban-Muir, Rustgi et al, 1998; McHutchison, Gordon, Schiff et al, 1998; Poynard, Marcellin, Lee et al, 1998). Although it appears to offer an important advance in treatment of HCV its cost-effectiveness needs to be understood in the New Zealand context.

This paper aims:

- to estimate the future costs of HCV in a cohort of IDUs in New Zealand;
- to examine the cost-effectiveness of combination therapy for treatment of IDUs;
- to investigate differences in future costs and cost-effectiveness between Māori and non-Māori.

The analysis is from the perspective of the taxpayer and does not include private costs to patients.

Methods

A Markov model was developed to model morbidity, mortality and associated costs in a cohort of 1000 IDUs over a period 30 years from the age of stabilising on methadone treatment.

The analysis compares no treatment with three main treatment options:

1. The current situation with stabilisation on methadone treatment at 31 years and only 5% receiving treatment for their HCV at an average age of starting HCV treatment at 37;
2. Stabilisation on methadone treatment at age 31, but combination therapy being provided to all patients who meet HCV treatment criteria within one year of starting methadone;
3. Earlier stabilisation on methadone treatment at average age 26, with combination therapy being provided to all patients who meet HCV treatment criteria.

Results

The results show that if no methadone or treatment for HCV is provided, a cohort of 1,000 non-Māori men infected with HCV is estimated to require treatment costs for liver disease of \$26.3 million (undiscounted) projected 30 years from the average age of commencement of methadone treatment (or \$13.4 million if discounted at 3%). The current situation results in increased costs of future liver disease because methadone treatment reduces drug-related mortality, and increases the number of IDUs who progress to more severe liver disease.

However, the model shows that if these people stabilise on methadone treatment at age 31 and all those who meet eligibility criteria are provided with combination therapy for HCV, future costs will be reduced to \$22.3 million (undiscounted), or \$10.6 million discounted at 3%. Average life expectancy will be increased by an estimated 5.2 years. The marginal cost-effectiveness ratio is \$20,580 per year of life saved (discounted at 3%).

The model demonstrates that cost-effectiveness would be improved considerably if all patients who meet treatment criteria are provided with HCV treatment.

Bringing forward the average age of stabilisation on methadone by 5 years to age 26 and starting combination therapy one year later would reduce the future costs of HCV for non-Māori men to \$20.8 million (undiscounted). It would improve cost-effectiveness to \$13,019 per year of life saved (discounted at 3%).

Future costs of HCV for Māori men are lower than non-Māori and are estimated at \$11.2 million per 1000 (discounted at 3%) if no HCV treatment is provided. The reason that costs are lower is because more Māori men die at a younger age from other causes. Again, the current timing and coverage of treatment is shown to be less cost-effective than bringing forward treatment to an earlier age. The current situation increases estimated average life expectancy by 4.2 years, and demonstrates a cost-effectiveness ratio of \$12,122 per year of life saved (discounted at 3%). This cost is actually lower than the cost per year of life saved for non-Māori men, which is in part due to the effects of methadone treatment in reducing mortality from injecting drug use, when the majority of deaths are due to overdoses (Dukes, Robinson and Robinson, 1992).

However, the model demonstrates that stabilising on methadone at age 31 and HCV treatment for all those meeting treatment criteria will improve the cost-effectiveness ratio to \$11,712 per year of life saved (discounted at 3%).

The effects of stabilising on treatment at age 26 instead of age 31 are to reduce the costs per year of life saved to \$8,069.

Future costs of HCV for non-Māori women are higher than estimated costs for either men or for Māori women. Without treatment of HCV, future costs (discounted at 3%) are estimated at \$15.2 million per 1000. With current treatment, discounted future costs are still estimated to total \$14.5 million per 1000 (discounted at 3%).

Improving the coverage of HCV treatment to all those non-Māori women who meet treatment criteria, would improve the cost-effectiveness ratio of \$25,715 per year of life saved (discounted at 3%).

Stabilising on treatment at the earlier age of 26 for non-Māori women has the effect improving the cost-effectiveness ratio to \$16,779 cost per year of life saved (discounted).

For Māori women, without treatment, future costs of HCV are estimated to total \$13.9 million (discounted at 3%) per 1000 women infected with HCV. With current treatment, these costs will be \$13.4 million per 1000 (discounted).

For Māori women, increasing the coverage of HCV treatment to all those meeting treatment criteria shows considerably improved results. Life expectancy is estimated to be increased 4.2 years by treatment. The estimated cost per year of life saved is reduced to \$17,092 (discounted).

Again, lowering the age of stabilisation on methadone treatment to 26 years improves the cost-effectiveness ratio to \$11,800 per year of life saved (discounted).

Conclusions

Methadone treatment demonstrates acceptable cost-effectiveness based on the criteria of extension of life as an outcome. Cost-effectiveness is better for Māori, because more life years are saved for Māori by treatment. However, cost-effectiveness could be improved considerably by also treating hepatitis C and by treating people at an earlier age.

**TE AKA ROA O TE ORANGA (THE FAR REACHING VINES OF WELLNESS) -
AN OUTCOME STUDY OF A MĀORI FOCUSED ALCOHOL AND DRUG TREATMENT
PROGRAMME.¹**

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Funding: Alcohol Advisory Council of New Zealand (ALAC)

The process of consultation which provided the basis for current development of a treatment outcome study of Māori focused alcohol and drug treatment, involved gaining support from a group made up of representatives of a number of alcohol and drug service providers from around the country. This occurred at an initial hui at ALAC. The roopu at that hui expressed some concerns about the potential pitfalls of the research process for Māori and challenged NCTD to develop a framework to ensure the integrity of the research kaupapa, especially with regard to ongoing accountability to and involvement of Māori.

A second hui was hosted at Waiwhetu Marae and involved a significant number of people who had attended the first hui. An accountability framework was presented by NCTD, which incorporated a number of key elements to ensure accountability, including control of the research by Māori and a primary focus on the needs of Māori. Maintenance of the various relationships within the research process and of the mana of all involved were also identified as central. Wairua, while a central issue, was determined as something that the research and the researchers would be measured against, rather than something that the research would seek to measure. Following presentation of the framework a number of

¹ Different title in the programme was “You all come back now you hear: developing a Māori alcohol and drug treatment research project and a framework for accountability”

issues were identified as important by hui participants, who gave tautoko for the development of the research. All participants wanted to clarify the processes and content of successful treatment for Māori with alcohol and drug problems, that is what helps people move from one point (out of control using) to another (control of substance use). Hui participants wanted to know how the treatment process could be helped along. The notion of as developing a toolbox of options known to help Māori deal with alcohol and drug problems was proposed. It was also noted that an important aspect of the project would be helping Māori to develop expertise in research, as well as extending and validating the Māori alcohol and drug treatment knowledge base. A primary focus on Takata Whaiora/Whanau, rather than specific services, was proposed, in order to allow consideration of the diverse array of Māori who present for assistance at a variety of services.

The next step was assembling the research team identified above, which first met in June 2001 to discuss key issues related to the project and its development and start to develop the project. Before identifying a structure for the research project, considerable discussion took place around tikanga and other issues pertaining to Te Ao Māori, especially in relation to the nature of health and well-being. Discussion also centred around current practices in the treatment/healing/recovery of Māori with substance use related problems, with particular focus on the broader context, including the history of Aotearoa. Following this discussion a basic outline for developing the project was identified (see next paragraph). It was at this hui that the project was given the name Te Aka Roa o Te Oranga by our kaumatua, Titari Eramiha. The name reflects our discussion of the nature of addiction and healing, as well as the broad context in which it occurs, and located the project squarely within a framework of health and wellbeing. It also reflects the location and process of that first research team hui.

The proposed project is essentially an evaluation of a 10-12 week outpatient group programme for Māori with alcohol and drug problems using pre, post and 6 month follow up assessment. The programme will be firmly founded on Māori principles and practices, as currently used by many Māori individuals and services, but will also incorporate non-Māori practices where appropriate. The parameters for application of tikanga and related practice will be determined through our kaumatua, who is supported in this area by a peer group of kaumatua. The content of the programme is in the process of being developed by the research team, who are seeking input from a core advisory team (Roopu Whakatatara) to be made up of attendees at the first consultation hui. This Roopu will provide a conduit for input to and from the Māori alcohol and drug field and the wider community.

In addition to developing a treatment programme, the project will also involve development of a Māori focused package of outcome measures. This will involve a combination of standard clinical measures such as the Leeds Dependency Questionnaire and the SF36, and a structured interview which will focus on issues of particular relevance and importance to Māori, for example, whanau/hapu/iwi functioning. The structured interview will draw on questionnaires already developed in the area of Māori mental health, for example, those by Durie and colleagues. With regard to standard clinical measures, preference will be given to those that have been examined with regard to their use with Māori.

The present project is seen as a first step in a longer term programme of research. It will not on its own provide all of the answers, but will help clarify key issues, provide support for Māori practice and contribute to a strong foundation for Māori healing in the area of substance use. In summary, the project will involve the development and evaluation a Māori focused treatment programme comprised of practices and processes currently employed by workers in this area. Development of an outcome measure package that is valid for Māori is another core aspect of the project. The ongoing input from a wide range of Māori in the alcohol and drug field and wider community is seen as central to the project, as is the development of Māori research capacity.

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