



Possible Contributing Factors to the Deterioration of Client Profiles at Odyssey House.

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ABSTRACT

This paper examines factors which the author feels may account for the deterioration of client profiles within the residential therapeutic community at Odyssey House McGrath Foundation. Therapeutic Communities worldwide have had to make adjustments to their programs and programming based upon factors which impact upon their ability to deliver adequate, if not quality services. These factors may be the result of social, political, and economic policies, which are inimical to a particular geographical area at either a local, state or federal level.

In Australia the alcohol and other drugs field has been impacted, mostly positively, through the introduction of the National Campaign Against Drug Abuse (NCADA) which began in 1985. The campaign (NCADA) arose out of a conference of leading state politicians and other interested and relevant individuals involved in the alcohol and other drugs field. The impetus for the conference had been the discovery, and disclosure the daughter of the then Prime Minister, Bob Hawke, was a heroin addict. The NCADA was afforded a substantial, for the times, budget to operate for 3 years. The major goal of NCADA was harm minimization.

The harm minimization approach was supported by the majority of mainstream health officials associated with alcohol and other drugs services. The 2 major approaches and/or interventions used to implement the harm minimization approach were:

- a. Needle and syringe exchange programs and,
- b. Greater availability of methadone services.

These interventions had a subsequent effect and impact upon those clients who would attend therapeutic communities. The effect of these interventions and their subsequent impact are investigated within the context of the paper.

Narcotics Anonymous

Narcotics Anonymous is recognized as a self-help fellowship to assist addicts who are attempting to recover from their addiction. At the time of the beginning of the National Campaign Against Drug Abuse Narcotics Anonymous (NA) meetings were relatively sparse. The majority of meetings took place in the state of New South Wales which had the largest heroin using population at the time. NA has escalated in its prominence significantly since that time. The increase in its prominence is another factor which is investigated as to its contribution to the overall deterioration of client profiles at therapeutic communities. This is an anomaly of sorts in that a number of Australian TCs incorporate the NA model within their program components.

The paper will examine the factors listed previously within the context of an 18-year snapshot of client profiles at Odyssey House McGrath Foundation. The profiles are taken from the clinical documentation contained within client records. Many of the records cited had been documented previously in other presentations thus the extensive availability of reported documentation which in some cases exceeds the recommended periods for the destruction of client files.

The profile indices are based upon the following:

1. Criminal activity.
2. Highest Educational Attainment
3. Intellectual Functioning
4. Employment

The data gathered from the files, and placed within the various indices is telling. Since 1985 there has been a consistent deterioration of client profiles within the therapeutic community at Odyssey House. In support of the in house findings is another study which is being conducted currently by the National Drug and Alcohol Research Centre (NDARC), situated on the campus at the University of New South Wales (UNSW), located in Sydney, Australia. The Australian Treatment Outcome Study (ATOS) is the first large-scale longitudinal study of treatment outcome for heroin dependence to be conducted in Australia. Other participating organisations are the Drug and Alcohol Services Council (DASC) of South Australia, and Turning Point, a research and training body, located in Melbourne, Victoria. The 3-month and 12 month data corroborates the in house findings of Odyssey House.

The findings of both studies highlights the severity of the problems of those persons seeking assistance for their conditions in the therapeutic community. Discussion of the findings and the implications for programming are discussed, as are plans for future programming adjustments.

NATIONAL CAMPAIGN AGAINST DRUG ABUSE

The National Campaign Against Drug Abuse (NCADA) was established in April, 1985. It arose from a conference of state Premiers and Commonwealth of Australia officials. The impetus for the Premiers Conference, as it was officially known, was the discovery the daughter of the Prime Minister, Bob Hawke, was a heroin addict. Funding for the initial stages of the campaign was set at \$100 million for a three-year period. The initial period was extended to 1997.

Its name was changed to the National Drug Strategy in 1993. The underlying goal of the campaign was to promote harm minimization through a variety of methods.

These include:

1. Intelligence gathering in illicit drugs.
2. More effective law enforcement measures.
3. Improved rehabilitation facilities and education programs (National Drug Strategy, 1993).

As part of NCADA, a mass media drug education program was established known as the Drug Offensive. The first strategic aim of the Drug Offensive was to channel health and other information to specific groups who were at risk from their use of certain drug types. The second strategic aim was to educate the public about the health dangers of irresponsible drug use. A number of mechanisms were used to implement the dual strategic goal.

These included:

1. TV and Radio commercials.
2. Posters targeted at risk taking behaviours.
3. Sponsorship of sports activities and music programs/concerts targeted at 12 - 24 year olds (National Drug Strategy, 1993).

Through NCADA, Australia established a co-ordinated response to one of its emerging health and social programs (Pitts, 1996). The financial commitment undertaken by the Commonwealth government to provide matching funds to the Australian states and territories has been a substantial one.

To date approximately \$1.3 billion dollars has been expended on NCADA and the National Illicit Drugs Strategy (NIDS), *Tough on Drugs*, which commenced in 1997. Although a significant expenditure in some ways, it pales when compared to the costs of alcohol and other drug abuse/misuse in Australia which was reported to be more than \$34.5 billion in 1998-99! (Collins and Lapsley, 2002).

The Ministerial Council on Drugs was established to co-ordinate the activities of NCADA and the National Drug Strategy.

Each of the states and territories health and police ministers were empanelled, along with a Commonwealth representative to oversee the campaign. MCDS has ensured that agreed upon policy decisions and strategies were co-ordinated and implemented throughout Australia. In 1993 NCADA established the National Drug Strategic Plan, 1993-1997. It served as a guide for the remainder of the campaign until it was reviewed in 1997 by Professors Single and Rohl. Their evaluation titled *Mapping the Future*, set the stage for the National Drug Strategic Framework 1998-99 to 2002-2003, *Building Partnerships*. The *Framework* presented a *shared vision and basis of co-operation and co-ordinated action to reduce the harm caused by drugs in Australia over a five year period until the end of 2003* (National Drug Strategic Framework, 1998).

Over the life of NCADA, the National Drug Strategy, and the National Drug Strategic Framework there were significant achievements. These included:

- Fewer people using illicit drugs.
- Fewer people smoking tobacco.
- Decreases in alcohol related fatalities.
- Increased international co-operation between law enforcement agencies.
- Reduced numbers of heroin overdose deaths since 1999.
- Lower rates of HIV and Hepatitis C infection than were projected 5 years ago.
- Record levels of drug seizures.
- Increased public awareness of drug issues.
- The availability of more treatment services.
- More people accessing treatment.
- More research, including evaluations about responses that can be successful or that hold promise.
- Prevention of an estimated 25,000 HIV and 21,000 HCV infections due to Australia's needle and syringe programs and subsequent savings to the community of at least \$2.4 billion, and
- Disruption of the supply of illicit drugs both offshore and at the border by Commonwealth law enforcement agencies and subsequent savings over \$800 million of harm to the community, estimated by the Australian Federal Police's Harm Index. Its major goal remains harm minimization.

HARM MINIMISATION

Harm Minimisation+ is an approach which has formed the basis of Australia's national drug policies since 1985. Harm Minimisation+ refers to policies and programs designed to reduce and prevent harm associated with both licit and illicit drugs. It aims to improve health, social and economic outcomes for both the community and the individual, and encompasses a wide range of approaches including abstinence-orientated strategies. (Department of Health and Aging, 2004).

This approach to the drugs conundrum was a major departure from previous years in which there had been an emphasis upon abstinence based interventions and services designed to impact on the licit and illicit drug users who had not embraced the abstinence model. Service deliverers were encouraged to view the drug using population within the public health+ context. It takes into account three interacting components: the individuals and communities involved; their social, cultural, physical and economic environment; and the drug itself (Department of Health and Aging, 2004).

Health officials associated with alcohol and other drugs services implemented this policy quickly. Its implementation was expedited by the immediacy to have a strategy to combat the HIV virus and the possibility of its devastating sequale within the at-risk gay, intravenous drug using (IDU), and heterosexual populations. Strong education, and prevention messages were developed which promoted safe sexual practices amongst the at risk groups and discouraged the sharing of needles and syringes amongst intravenous drug users. As a result Australia has one of the lowest rates of seroposivity amongst IDUs in the world at between 1-5% (Kaldor et al, 1993).

Needle and Syringe Exchange Programs, **Needle syringe Programs**

One approach which has contributed significantly to the low rates of seroposivity amongst IDUs has been the establishment of first needle and syringe exchange programs and services. The initiative changed its nomenclature recently due to the low rates of actual exchange of used needles and syringes for clean ones. There was an early recognition by health officials in Australia of the link of IDUs to HIV and AIDS cases (Wodak, 1995). Working groups in Australia focussed upon the need to prevent another New York+ like experience from occurring in Australian cities amongst the IDU population.

HIV infection is still relatively uncommon in Australian IDUs (Kaldor et al, 1993). HIV test results of prison entrants in several jurisdictions of Australia continue to be well under 1% (Wodak, 1993). Of the cases with a documented known exposure category since the first case was demonstrated in 1982, 2003 statistics indicate 81.6% were attributed to male homosexual/bisexual contact, 4.6% to male homosexual/bisexual contact and IDU, and 6.9% to heterosexual contact. The remaining 3.1% of those seropositive consisted of hemophiliacs, recipients of blood transfusions and/or blood products, or other/undetermined (Australian HIV Surveillance Report, 2004).

AIDS was identified as a priority issue early in Australia. In 1987 a major advertising campaign based upon a "Grim Reaper" theme was established. The wife of the then Prime Minister, Mrs Hazel Hawke, launched a pamphlet aimed to educate IDUs about the potential risks of sharing needles and syringes. The pamphlet was titled "Never Ever Share Needles" and was part of the Drug Offensive. The impact of the launch was tremendous due to the imprimatur of the Prime minister, and his wife, who were the parents of an IDU. In 1989 a National HIV/AIDS Strategy was established. Within the document there was an endorsement for the establishment of needle and syringe exchange programs (Department of Community Services and Health, 1989).

The State of NSW had the first pilot needle and syringe exchange program which began in 1986. It was located in Sydney, which was the largest IDU population in Australia. Other needle and syringe exchange programs were established later. Initially they were drug store or pharmacy based. As costs dropped in terms of dollars per unit more programs were established. In 1991 it was noted that needle and syringe exchange programs received a larger share of total education and prevention funding than programs for any other target group (Inter Governmental Committee on AIDS, 1992).

Statistics for the distribution of needles and syringes through government auspiced programs in Australia's six states and two territories indicate over 31,800,000 were distributed in 1999-2000 at a cost of \$22,674,000. A wide range of distribution methods are employed currently, which include vending machines and mobile units to reach IDUs who are deemed vulnerable and less mobile, outreach services, as well as primary and secondary outlets (Commonwealth Department of Health and Aging, 2002). These methods share wide support across a range of medical, health, political, and community groups within Australia!

METHADONE TREATMENT IN AUSTRALIA

Methadone as an intervention for the treatment of opiate addiction was pioneered in the United States by Dole and Nyswander (Dole and Nyswander, 1967). In Australia, Dr Stella Dalton pioneered work to establish methadone treatment in Australia (Connexions, 1989). Dr Dalton, treating a group of heroin users at Wisteria House, demonstrated great results in the client group she was working with at the time. Success rates of 88% at follow up showed the client group had no new convictions (Dalton, Duncan, Taylor, 1976). Policy makers embraced the results with hope and proceeded to expand Methadone treatment in the state of New South Wales, and eventually in most of Australia. There have been other studies which have highlighted some of the problems and shortcomings inherent in this form of treatment. Ongoing illicit drug use (Foy et al, 1989), high recidivism rates for inmates who have been on methadone were shown on post release studies, as well as higher rates of convictions than a control group (Hume and Corta, 1989). Methadone treatment was actually curtailed at one time during the late 70s and early 80s in Australia. Reasons for the declination were cited as too liberal dispensing policies (Luger, 1989), which resulted in the diversion of methadone onto the black market, and other interventions becoming available such as therapeutic communities and Narcotics anonymous (Davies, 1986).

There is a wide body of research in Australia and the United States which supports Methadone treatment as an efficacious intervention (Dole and Nyswander 1965; Dalton and Duncan, 1979; and Reynolds and Margo, 1975). Other studies attest to methadone's contribution to decreased opiate use, increased employment, and its positive impact upon criminality (National Institute of Drug Abuse, 1981; McClelland et al, 1981; Judson, Ortiz and Crouse, 1980; McGlothlin and Anglin, 1981; Dole and Joseph, 1978; Ward et al, 1998).

Methadone is probably the most widely researched of all available treatment interventions in Australia (Ward, Mattick, and Hall, 1992; Newman and Whitehill, 1979; Jaffe et al, 1972; Grondbladh and Hume, 1989; Vanischemi et al, 1991). Given the wide body of research which initially supported treatment, Australian politicians and health officials sought to increase its use (Caplehorn and Batey, 1992; Bammer et al, 2000).

Methadone treatment gained status as a major plank in the harm minimization platform when it was endorsed as an appropriate treatment intervention at the 1985 Premier's Conference on Drug Abuse when the National Campaign Against Drug Abuse was established.

Since the establishment of NCADA methadone treatment has had a steady increase across Australia. The only exceptions to this was the state of Tasmania, and the Northern Territory, both of whom had no publicly funded methadone programs until recently. In 1985, just prior to the Premiers conference there were 2203 people on methadone nationwide. By 1991 there were 10,000 people on methadone nationwide (National Drug Strategy, 1993). Currently there are 36,986 persons on alternative pharmacotherapies, which include methadone and buprenorphine. Client numbers for methadone treatment and buprenorphine treatment are shown in the tables below:

TABLE 1 - 1985 to 1993

State/ Territory	1985	1986	1987	1988	1989	1990	1991	1992	1993
NSW	840	2672	3260	3670	4029	5014	5829	6392	7279
VIC	150	280	455	607	641	1407	1630	1980	2376
QLD	819	833	842	951	962	967	1090	1451	1603
WA	224	300	269	364	475	446	514	505	574
SA	120	297	320	336	359	400	541	772	877
ACT	50	64	68	71	77	86	90	144	280
TAS									
TOTAL	2203	4446	5204	5999	6543	8320	9694	11244	12989

TABLE 1a - 1994 to 2003

State/ Territory	1994	1995	1996	1997	1998	1999	2000	2001 **	2002 **	2003 **
NSW	8305	No Information Available		11365	12107	12600	13594	15069	15471	16165
VIC	2793		4464	5334	6700	7647	7743	7700	8685	
QLD	1952		2754	3011	3341	3588	3745	3896	4289	
WA	645		1242	1654	2449	2140	2307	3602	4079	
SA	888		1760	1839	1985	2198	2522	2417	2486	
ACT	323		387	406	559	615	641	590	443	
TAS	90		267	306	370	423	464	513	498	
NT						2	32	25	21	98
TOTAL	14997			22239	24657	27906	30237	32516	34210	36300

**** Figures for these years include Buprenorphine Clients**

TABLE 2 - BUPRENORPHINE - 2001 - 2003

State/ Territory	2001	2002	2003
NSW	82	938	1981
VIC	276	2812	3890
QLD	13	576	1034
WA	0	877	1540
SA	0	0	0
ACT	0	36	104
TAS	5	47	44
TOTAL	376	5304	8641

The increase nationwide had been tremendous since the endorsement of methadone as a treatment modality. The total number of persons on alternative pharmacotherapies is doubly significant when it is estimated the total number of heroin dependent persons in Australia is estimated to be between 62-74,000! (Hall et al, 2001). There has been a shift towards the use of buprenorphine and away from methadone after the release of the results of the National Evaluation of Pharmacotherapies for Opioid Dependence (NEPOD). The study provided a high level of evidence as to the effectiveness of pharmacotherapies obtained from controlled clinical trials. An additional reason for the shift has been a public backlash against some public methadone clinics whose clients disrupt the public amenity. These concerns have been highlighted and promoted by high profile radio hosts in Sydney in particular.

NARCOTICS ANONYMOUS (NA)

Development

The first meeting of Narcotics Anonymous (NA) was held at the United States public health facility located in Lexington, Kentucky in 1947 (Popple, 1995). A community-based group, located in Los Angeles, California began what is recognised as NA today. Using principles from Alcoholics Anonymous (AA) and those from the Lexington meetings NA was established in 1953. Centered in Los Angeles it spread to other US cities and Australia in the 1970s. An assembly of local delegates was established in 1978, and in 1982 the NA self titled basic text was published. The movement has grown since that time (Narcotics Anonymous, no date).

Program

The information pamphlet describes NA as a not for profit fellowship or society of men and women for whom drugs had become a major problem – recovering addicts who meet regularly to help each other stay clean. The core of the NA program is a series of personal activities known as 12 steps. These include admitting there is a problem; seeking help; self appraisal; confidential self disclosure; making amends where harm has been done; and working with other addicts who want to recover. There is an emphasis on spiritual awakening in a practical context. Key to the therapeutic value of NA is the belief in one addict helping another. Group meetings are run on common NA principles and are either open, where anyone can attend, or closed, only for those who wish to address their own drug problem. There is a belief in a disease concept of addiction that is not meant to qualify philosophical or medical meanings. The term disease is useful for NA members as a means to accept their condition. As a result NA members are encouraged to abstain from all drugs (Narcotics Anonymous, no date).

NA in Australia

It is reported that NA began in Australia in the late 1970s (Narcotics Anonymous, no date). In 1985 when the National Campaign Against Drug Abuse began, there were 31 meetings held weekly in New South Wales, 77 held nationwide and 3500 held worldwide. The first regional Australasian convention held in Sydney in 1984 had 500 registrants (personal communication). Due to Australia's large land mass it took longer for the NA message to spread. The movement grows where there is ample literature available to dispense to addicts.

In 1996 an NA convention held in Sydney had 1500 registrants. Meetings are estimated to have between 5-100 persons,. This accounts for a substantial number of addicts involved in this movement, especially when there are over 420 meetings held nationwide currently, 45% of which are held in New South Wales, and 28,000 worldwide. The total number of meetings does not include those held in prison settings.

THERAPEUTIC COMMUNITIES IN AUSTRALIA

Therapeutic communities have operated in Australia since the mid to late 1970s (CarrGregg, 1984). It is believed the first therapeutic community was We Help Ourselves (WHOS) in 1973. The Odyssey House program was established in 1977 in Sydney's southwestern suburbs. Other therapeutic communities established within this same period of time were The Buttery, Karralika, and Westmount Co-operative. There was little, if any, formal association between these programs. A clear rationale for this would be speculative, but it would appear a sense of mistrust, professional jealousies, and divergent applications of the therapeutic community model could all be cited as contributing factors. Due to the existence of such enmity the movement remained fractuous initially. In 1985, at the Premiers Conference, which was the genesis of the National Campaign Against Drug Abuse, a situation arose which would alter that situation and forge a better understanding among therapeutic community administrators in Australia.

During the Conference, there were a number of workshops, and discussion groups which took place. Each was defined by the particular discipline of the various professions and groups who were attendees to the Conference. As such, accommodation was made for psychiatrists, psychologists, doctors, social workers, nurses (of various Ns) etc. When the time had come for the groups to congregate one had not received a grouping - therapeutic communities!

The attendees requested, and were granted, a facilitator. This resulted in a working party, which scheduled a follow-up meeting at Odyssey House in Melbourne. Through a series of meetings, which alleviated and dispelled many of the misconceptions about the philosophies of various programs, an association was formerly established in 1985. It was named the Australian Therapeutic Communities Association and its first National Conference was held in November 1986.

Therapeutic Community Effectiveness

A number of research studies have evaluated the effectiveness of therapeutic communities (Bale, 1979; Collier and Hijazi 1974; Pills, 1992; De Leon, Wexler, and Jainchill, 1982; Latukefu, 1987; Toumborou, 1994). These studies have shown that therapeutic communities participants display improvements on post treatment variables such as employment, diminution of drug use, reductions in criminal incidences and convictions, and increased pro social behaviour in terms of education and employment. One study determined that the cost benefits ratio for various treatment models for the treatment of opioid dependence was \$1 in treatment costs for every \$17 spent when someone was not in treatment (Scanlon, 1976).

A more recent study has shown that in terms of crime reduction alone costs of treatment are recovered during the period of treatment and there are further cost savings for up to 2 years post treatment (*Hubbard, et al, 1989*). The same study indicated treatment resulted in improvements in other negative behaviour and treatment would most likely result in lower social service costs. Further benefits were cited for intravenous drug users and their sex partners due to the prevention of HIV/AIDS, therapeutic communities in Australia have been recognised as an acceptable form of treatment for drug users who find them acceptable (*National Drug Strategy, 1993*). Therapeutic community administrators are conscious of their role in the intersectoral approach to alcohol and other drug problems in Australia. They accept their role in providing services for those who suffer the most severe consequences of the harm associated with their drug use, criminal activity, and social disadvantage (*National Drug Strategy, 1993*). Therapeutic Communities are part of the Australian drug treatment scene and have been cited as leading to significant improvement in behavioural and psychological status of clients at follow-up in those individuals who remain in treatment beyond three months with positive outcomes directly increasing with time spent in treatment (*Heather and Tebbutt, 1990*).

Odyssey House

Odyssey House was founded by Dr Judianne Densen-Gerber in 1966 in New York City. She developed a long term psycho-therapeutic setting where drug misusers might be more responsive to psychiatric intervention. The first Odyssey House program was established in 1977 at Campbelltown in the state of New South Wales. A second facility was established in Melbourne, Victoria in 1979, and subsequently two other facilities were established in New Zealand in the cities of Auckland and Christchurch. The Odyssey House method is designed to allow individuals to participate in an environment free of substances of misuse whereby gains can be made in social, vocational, and psychological functioning.

Odyssey House Client Profile – 1985 to present

A profile of Odyssey House participants was developed using available clinical records and data for the years 1985 to present. A composite snapshot has attempted to be taken in key indices which are consistent with the goals of the Odyssey House program. Gains are expected to be made in the areas of social, vocational, and psychological functioning.

These gains are to a large degree based upon what skills or resources each individual brings to the treatment setting.

The profile indices are:

1. Criminal activity
2. Educational Attainment
3. Intellectual Functioning
4. Employment

Indices are based upon the acquisition of data from the Odyssey House process of Clinical Case Review, or *supervision*. Data for the years 2001, 2002 was selected randomly from client files. *Supervision* is a process by which each participant's progress is measured against their treatment/self help goals. A complete social history, drug use history, previous treatment experience for substance misuse, psychiatric, psychological profile, and family background are integrated into a progress report prepared by staff, along with an accompanying progress note from the resident participant, including goals for further treatment. The reports are reviewed by a clinician, or clinical team, who have no formal association with the Odyssey House program. The review is a participatory process through which appropriate clinical management is confirmed or adjustments made as needed.

THE INDICES

Criminal Activity

A substantial body of evidence exists which demonstrates a strong link between drug misuse and crime (Chaiken and Joynson, 1988; Bell, 1986; Chaiken, 1986, Wish and Johnson, 1986, Canton, 1999, Inciardi, 1979). A significant proportion of Odyssey House residents (55%) are referred through the criminal justice system. This particular body of referrals has increased significantly since 1985 when 35% of referrals were through the same process. In recent years in Australia there has been a much greater emphasis upon diverting drug misusers into treatment through national and state sponsored diversion initiatives (National Drug Strategy, 2001).

Education Attainment

Education has been found to have positive benefits upon self concept. Participation in an education role has been shown to enhance self esteem in addition to other benefits (Biase, 1981). Lowered educational attainment places individuals at risk of lowered self esteem, and negative and deviant self concepts which are often the precursors for continued drug misuse and other anti-social activities (Pitts, 1996).

Intellectual Functioning

A statistical association had been established between crime and cognitive ability over time (Hernstein and Murray, 1994). In addition higher cognitive ability can act as a preventative to criminal activity when there are other precursors present in high risk groups. Intellectual functioning is measured in Odyssey House using standard assessment protocols. One study has shown there to be a linear association between highest treatment levels attained in Odyssey house and intelligence (Toumborou et al, 1994).

Vocational Attainment / Employment

Employment rates in the year prior to entry to treatment in therapeutic community samples have shown relatively low rates (Toumborou et al, 1994). Stable employment is quite often an excellent indicator of treatment outcome, and in some cases a predictor of relapse (Hermalin et al, 1990; Castelani et al, 1997). Income levels among some samples (N= 63) were generally poor with half of one sample unemployed, while the remainder had worked 3 months or less (Pitts, 1991). In another sample (N=235) only 30% had been in employment at least half of the year (Toumborou et al, 1994).

Methodology

The cohorts for the four indices are composite groupings of the three highest treatment levels attained while in the program. These are levels 2,3, and 4, which represent the most stable population samples. The aggregate groupings were designed to give each cohort sufficient numbers in order to assess the effect of possible contributing factors to the deterioration of their profiles within the specific period.

Data was available for the years:

1985 . 86
1988-89
1992
1996 . 1997
1999
2001 . 2002.

The gaps in the availability of data can be explained due to interruptions in the Clinical Case Review process, and insufficient records for other years. The synopsis was designed to coincide with the onset of the National Campaign Against Drug Abuse and its harm minimization/harm reduction strategies; the rise in Narcotics Anonymous membership; increases in methadone treatment and alternative pharmacotherapies.

The Sample

The total of the sample was N = 206

Grouping by year were:

1985	n =	22
1986	n =	25
1988	n =	28
1989	n =	30
1992	n =	19
1996	n =	18
1997	n =	13
1999	n =	23
2001	n =	13
2002	n =	15

By gender there were: 145 males (70.4%) 61 females (29.6%)

Average ages by year were:

1985	26 years old	Range	19-33 years old
1986	30.3 years old	Range	20-30 years old
1988	28.4 years old	Range	20-39 years old
1989	28.9 years old	Range	19-36 years old
1992	27.4 years old	Range	20-33 years old
1996	26.2 years old	Range	19-37 years old
1997	27.6 years old	Range	22-40 years old
1999	29.2 years old	Range	20-41 years old
2001	23.9 years old	Range	19-35 years old
2002	28.3 years old	Range	19-43 years old

Drugs Of Choice

The drugs of choice are listed below along with the average years of usage. The drug of choice was designated as the drug used most often on a daily basis in the year prior to entry to treatment. Drugs are listed by category:

Drugs Of Choice And Years Used

	Heroin	Alcohol	Amphetamines	Sedative Hypnotic	Other Opiates	Ecstasy	Cocaine	THC	Benzo's	Methadone
1985	75%	5%	10%	10%						
	Average Years Used . 8.5					Range 2-16 years				
1986	72%	12%	8%	8%						
	Average Years Used . 7.8					Range 2-15 years				
1988	68%	14%	11%	10%						
	Average Years Used . 8.9					Range 2-27 years				
1989	60%	10%	27%		3%					
	Average Years Used . 8.2					Range 1-20 years				
1992	42%	11%	32%	5%	5%		5%			
	Average Years Used . 6.1					Range 2-12 years				
1996	32%	5%	32%			5%		26%		
	Average Years Used . 7.2					Range 2-16 years				
1997	29%	14%	7%	11%	-	-	7%	18%	7%	7%
	Average Years Used- 9.6					Range 4-16 Years				
1999	39%	20%	7%	-	2%	-	5%	18%	9%	-
	Average Years Used- 10.6					Range 2-27 Years				
2001	24.5%	33%	14%	-	-	8%	-	16%	-	4.5%
	Average Years Used- 8.5					Range 5-17 Years				
2002	12%	19%	15%	4%	-	-	-	38%	8%	4%
	Average Years Used- 10.2 Years					Range 2-28 Years				

Length Of Stay In Program

Length of stay in program was calculated by totaling the accumulated time in program if that time had not been disrupted by more than 1 year due to discharge for breach of program rules or leaving against advice (split).

Length of Stay in Program by Year:

1985-	10.4 months	Range 2-19 months
1986-	11.4 months	Range 5-18 months
1988-	9.3 months	Range 3-29 months
1989-	8.7 months	Range 3-27 months
1992-	9.1 months	Range 4-26 months
1996-	9.3 months	Range 4-14 months
1997-	17 months	Range 3-17 months
1999-	14.6 months	Range 3-47 months
2001-	13.3 months	Range 2-35 months
2002-	13 months	Range 3-15 months

Criminal Convictions

Criminal convictions were calculated based upon adult criminal convictions. Multiple convictions for the same offence which occurred during a single criminal instance were recorded as one conviction.

Average Convictions by Year:	1985 -	4.1 Convictions	Range 0-15
	1986 -	2.9 Convictions	Range 0-11
	1988 -	3.6 Convictions	Range 0-11
	1989 -	6.1 Convictions	Range 0-21
	1992 -	3.8 Convictions	Range 0-11
	1996 -	4 Convictions	Range 0-15
	1997 -	3.1 Convictions	Range 0-8
	1999 -	5.2 Convictions	Range 0-40
	2001 -	1.65 Convictions	Range 1-11
	2002 -	1.3 Convictions	Range 0-4

Intellectual Functioning

Rates of Intelligence were determined by using scores obtained on the Weschsler Adult Intelligence Scale for Adults (WAIS), and the Welschsler Adult Intelligence Scale for Adults Revised Edition (WAIS-R) and the Welschler Adult Intelligence Scale 3rd Edition (WAIS-3), the WAIS, WAIS-R are standardised tests to measure general intelligence using a verbal scale consisting of 6 sub test, and a performance scale consisting of 5 sub tests. A composite score is recorded in each domain as either Verbal Intelligence Quotient (VIQ) or Performance Intelligence Quotient (PIQ). The raw scores yield a standardised score called Full Scale Intelligence Quotient (FSIQ) which is determined in conjunction with the age of the participant. The WAIS and WAIS-R are adapted to be culturally sensitive.

Scores by Year are:	1985	N=22	Average FSIQ-	114	Range-	84-125
	1986	N=25	Average FSIQ-	108	Range-	86-131
	1988	N=28	Average FSIQ-	98.6	Range-	71-124
	1989	N=30	Average FSIQ-	101	Range-	74-133
	1992	N=19	Average FSIQ-	96	Range-	72-111
	1996	N=18	Average FSIQ-	90.3	Range-	73-104
	1997	N=13	Average FSIQ-	97.7	Range-	77-116
	1999	N=23	Average FSIQ-	102.5	Range-	78-134
	2001	N=13	Average FSIQ-	98.5	Range-	73-123
	2002-	N=14*	Average FSIQ-	91.5	Range-	81-118

*One FSIQ could not be interpreted.

Employment

Employment Levels by Year are:

	<u>Salary</u>	<u>Range</u>	<u>% Employed</u>
1985	\$11,363	\$11,000 - \$80,000	68%
1986	\$ 9,364	\$ 2,500 - \$40,000	80%
1988	\$10,293	\$ 2,000 - \$36,000	72%
1989	\$10,293	\$ 4,000 - \$55,000	65%
1992	\$12,000	\$ 5,000 - \$39,000	68%
1996	\$10,166	\$ 3,000 - \$35,000	67%
1997	\$23,271	\$5,200-\$38,000	54%
1999	\$23,795	\$9,360-\$45,000	35%
2001	\$27,820	\$14,560-53,300	59%
2002-	\$48,297	\$48,297	7%

DISCUSSION – ODYSSEY HOUSE SAMPLE

Age

Demographic comparisons of the groups by year were relatively insignificant. The average age of the population has decreased since 1986, while the age range remained consistent at between 23-29 year of age in subsequent years. There is some evidence a trend towards a younger population in recent years could have an impact upon drug using trends, particularly drugs of choice.

Drugs of Choice

All data indicated the sample population were polydrug users. For the years 1985-89 the drug of choice was by far heroin. The pattern of drug usage changed in 1989 as there was an increase in the use of amphetamines which coincided with the decrease in average age for the 1989, 1992, and 1996 samples. In 1997, 1999, and 2001 heroin was again highly featured, but there were increases in the alcohol, THC, and amphetamine categories. Changes in the patterns of usage could be explained by two factors:

1. In 2001 Odyssey House opened the Milton Luger Detoxification Unit. A medically supervised 12-bed facility which assists individuals to detoxify from all drug classes with medical assistance, including alcohol and marijuana. Approximately 40% of all detoxification completions chose to enter the therapeutic community program.
2. From mid 2001 to mid 2003 Australia experienced a heroin drought. The availability of heroin was curtailed significantly and patterns of drug use shifted to greater use of amphetamines, THC, and ecstasy in younger drug using populations. The reasons for the drought were cited as a greater success in drug seizures by the Australian Federal Police, and a shift in the production and export of heroin caused by the War in Afghanistan.

The average use by year remained consistent in the 1985, 1986, 1989, and 1992 samples with ranges between 7.8 and 8.9 years of use. The average use by year increased for the 1997, 1999, and 2002 samples, with ranges between 9.3 and 11.7 years.

Criminal Convictions

The rates of convictions among all sample groups were relatively unremarkable. The 2002 sample had the lowest conviction rate at 1.3, and 1989 the highest at 6.1. The trend towards a somewhat younger population appears unremarkable in this indice. However, worthy of note is the recent emphasis in Australia upon the diversion of young people, who have minimal criminal careers, to treatment for their drug problems. Secondly, these samples represent the longest staying and therefore most stable of the population sample. It would be of interest to profile the dropout clientele on this measure.

Educational Attainment

The 1985 and 1986 samples had the highest rates of tertiary participation. The 1997 and 2002 had no representation in this category, and the 1999 and 2001 samples were low. From 1986 each subsequent sample by year had a greater proportion of educational attainment equivalent to Year 10 / 10th Grade (School Certificate), or Year 9/Grade 9 (Form 3) or less. The 1998 sample had the highest proportions, with a combined total of 89%, while 1989 (64%), 1992 (68%), 1996 (77%), 1997 (84%), 1999 (71%), 2001 (76%), and 2002 (80%) all showed a general decline in higher level education attainment.

Intellectual Functioning

Rates of intellectual functioning were determined using scores obtained from the Weschler Adult Scale for Adults (WAIS), the Weschler Adult Intelligence Scale for Adults . Revised Edition (WAIS-R), and the Weschler Adult Intelligence Scale for Adults . Third Edition (WAIS-3).

The 1985 sample had the highest aggregate average Full Scale Intelligence Quotient (FSIQ) at 114. This score would be regarded generally as %bright average+. In 1986 the FSIQ fell 6 points, and the 1988 sample dropped a further 9.4 points. There was a slight rise in 1989, but by 1996 there had been an overall decline of 23.7 points in intellectual functioning from 1985. The 1997(97.7), 1999(102.5) and 2000 (98.5) samples all rose, while the 2002 sample fell to 91.5 FSIQ. This represents an overall decline of 20.35 points in intellectual functioning since 1985. The drop is statistically significant and is a cause for concern.

Employment

All groups had relatively low rates of pay with a high of \$27,820 (2001) and a low of \$9,364 (1986). The 1985 sample had the highest upper end range at \$80,000 pa.

All groups had relatively stable percentages of employed persons, but in each year these would have been down on national rates of employment.

THE AUSTRALIAN TREATMENT OUTCOME STUDY

The Australian Treatment Outcome Study (ATOS) is the first large-scale longitudinal study of treatment outcome for heroin dependence to be conducted in Australia. ATOS is co-ordinated by the National Drug and Alcohol Research Centre (NDARC), located on the campus at the University of New South Wales, and is conducted in collaboration with the Drug and Alcohol Services Council of South Australia (DASC), and Turning Point, a research center of the Victoria State Government, located in Melbourne.

Heroin use, with its associated harms, represents a serious public health concern, and generates many challenges for treatment providers. In Australia, an estimated 74,000 individuals are thought to be heroin dependent, with more people treated for dependence on opioids than any other drug class. Despite this little is known about how effective the main treatment options are in practice.

The aims of ATOS are:

1. To describe the characteristics of people seeking treatment for problems associated with heroin use in Australia;
2. To describe the treatment received; and
3. To examine treatment outcomes and costs at 3 and 12 months after commencement of treatment.

Method

Nineteen treatment agencies were randomly selected from within the three main treatment modalities (Methadone/Buprenorphine maintenance therapy; detoxification; residential rehabilitation), stratified by health service. Five hundred and thirty five individuals entering treatment and 80 heroin users not seeking treatment were recruited into the study, and interviewed by NDARC staff using a structured questionnaire. Valid and reliable instruments such as the Opiate Treatment Index (OTI), Short Form . 12 Interview (SF-12) and Composite International Diagnostic Interview (CIDI) were used to measure drug use, health, criminal activity, and psychiatric co-morbidity. Consent and locator details were obtained to facilitate follow up at 3 and 12 months (Ross et al, 2002).

Major findings

Baseline results from ATOS, N=535, are represented initially and data from the Odyssey House sample, N=38, is presented subsequently at baseline, 3 months, and 12 months.

Demographics

The mean age of the sample was 29.7 years, and 66% were male. The mean length of school education was 10 years, and 41% had a prison history.

Drug Use

Participants are long-term polydrug users having used a mean of 9 drug classes in their lifetime.

Participants in the Residential Rehabilitation (RR) group exhibited a greater level of polydrug use than the Methadone Treatment (MT) and Detoxification (DTX) groups, having used more drug classes lifetime, and in the preceding 6 and 1 month period. In addition, the RR group became intoxicated at a younger age. The RR group appear to be more drug entrenched than the other modalities.

Heroin Use and Dependence

The mean length of heroin use was 9.6 years, almost all of the sample met DSM-IV criteria for heroin dependence, and the majority had used heroin at least daily over the preceding month.

Treatment History

The majority of the sample had been in treatment for heroin dependence in the past with inpatient detoxification and methadone maintenance being the most commonly tried treatment types. The RR group were more likely to have been in treatment previously, and had tried a wider range of treatments than the MT and DTX groups.

Injection-related risk-taking behaviour

The majority of the sample had injected at least daily in the preceding month, and 37% of injectors had either borrowed or lent used injecting equipment in that time.

Heroin Overdose

Heroin overdose was a common event among the sample, half having overdosed in their lifetime, and a quarter having done so in the preceding 12 months.

Participants in RR appear to be particularly at risk, being significantly more likely to have overdosed and to have done so in the preceding 12 months, as well as having overdosed on more occasions and more recently than other modalities.

A recent review of the heroin overdose literature identified a range of cardio-pulmonary, muscular and neurological complications related to non-fatal overdose (Warner-Smith, et al, 2001). Therefore it is reasonable to expect a notable proportion of ATOS participants, and the RR group, may experience some degree of overdose related co-morbidity.

Social Support

12% of the sample had no close friend or people they felt they could rely on. Previous research has suggested that patients with more social support do better in treatment (McClellan, 1983; Hubbard et al, 1989).

Criminal Activity

A large proportion of the sample had been criminally active in the month prior to interview, with acquisitive property crime the type of offense most commonly reported. Half of males and females had committed a crime in the preceding month.

Health

Overall physical health of the sample was poor, being one standard deviation below the norm for the general population. Females reported poorer general and injection related health than males.

Mental Health

There was a high degree of psychiatric co-morbidity within the sample. Half had scores indicative of a severe disability on mental health scale SF-12, a quarter meeting criteria for current DSM-IV diagnosis of major depression, a third having ever attempted suicide, and 41% meeting DSM-IV criteria for Post Traumatic Stress Disorder. Almost three quarters of the sample met the DSM-IV criteria for Anti Social

Personality Disorder (ASPD), and half for Borderline Personality Disorder (BPD). The RR group showed greater impairment than the other modalities, being more likely than the MT and NT (no treatment) to have a mental health score on the SF-12 indicative of severe distress, more likely than the DTX and NT groups to receive a diagnosis of PTSD, and more likely than all modalities to screen positive for BPD.

The high prevalence of psychopathology among heroin users had direct implications for treatment outcome and clinical practice. Psychopathology had consistently emerged as a salient predictor of poor treatment outcome (Eland-Gooseman et al, 1997).

Discussion

The participants in the study were polydrug users, with those in the RR group exhibiting a greater level of polydrug use than the MT and DTX groups, having used more drug classes, and becoming intoxicated at a younger age, thus having more entrenched during drug using patterns than the other groups. The RR group had greater levels of previous treatment experience and had tried a wider range of treatment experience.

Needle sharing was common amongst the sample, as was heroin overdose. The RR group had significantly higher rates of non fatal overdose in the preceding 12 months, as well as having overdoses on more occasions than the other modalities. Special support was generally lacking in the sample and females had poorer general and injection related health than males. There were high rates of criminal activity, with property crime being the most reported offence.

There was a high degree of psychiatric co-morbidity in areas of severe disability on mental health scales. 25% of the sample were clinically depressed, 38% had attempted suicide and 41% met the criteria on DSM-IV for PTSD, while almost three quarters met the criteria for ASPD and 50% for BPD. The RR group showed greater impairment than other modalities on mental health scores, indicating severe distress, and more likely to receive a diagnosis of PTSD than the DTX and NT groups, and more likely than all modalities to screen positive for BPD.

Conclusion

The sample exhibits high rates of drug use, criminal activity, mental health, and general health problems, rates of dependence, risk taking behaviour, high rates of non-fatal overdose and high rates of psychiatric co-morbidity.

The RR group reported the greatest number of severe problems than the other modalities at baseline. This group therefore poses the greatest challenge to residential treatment agencies than other modalities in the sample.

ODYSSEY HOUSE ATOS BASELINE DATA

N = 38

Demographics

Male %	68
Mean Age (years)	25.1
Main source of income during past month (%)	
Wage / Salary	32
Govt pension/allowance/benefit	29
Criminal Activity	26
Other income	13
Every in prison (%)	18
In treatment as a result of a drug court order (%)	0

Mean age at time of 1 st Intoxification on any drug *years)	13.1 (SD 3.2; range: 7-25)
Drug used at time of 1 st intoxicification (%): Cannabis Alcohol Amphetamines Alcohol and Cannabis	 45 47 3 5
Mean Age when 1 st injected any drug (years)	18.1 (SD 3.6: range: 11-27)
Mean age when 1 st used heroin (years)	18.3 (SD 4.3; range: 9-31)
Mean number of drug classes: Ever used Ever injected Used in preceding 6 months Injected in preceding 6 months	9.4 (SD 1.3; range: 6-11) 3.7 (SD 1.7; range: 0-7) 6.6 (SD 1.9; range: 2-10) 2.7 (SD 1.6; range: 0-6)
Used heroin by smoking only (%) Ever In last 6 months	 8 11
Overdosed on heroin (%): Ever In last 6 months	 53 37
Used Heroin almost daily in the preceding 12 months	92

Criminal Activity

Criminal Activity in preceding month	%
Property Crime	47
Drug Dealing	13
Fraud	21
Violent Crime	11
Any Crime	55

Psychiatric Distress

Disorder	%
Current Major Depression (current)	26
Post Traumatic Stress Disorder (lifetime)	40

Personality Disorders

Disorder	%
Anti social Personality Disorder (ASPD)	79
Borderline Personality Disorder (BPD)	61

ODYSSEY HOUSE ATOS 3 MONTH DATA

Baseline sample n=38

Proportion followed up at 3 months = 35/38= 92%

NB: The baseline data presented below is based on n=35

Treatment status and abstinence rate at 3 months (n=35)

Still in index treatment (%)	54
Currently in treatment, but not the index treatment (%)	20
Any intervention since baseline (%)	26
Abstinent from heroin for month preceding 3mth follow-up interview (%)	91

Drug use

(N=35)	<u>Baseline</u>	<u>3mths</u>
Heroin use days in preceding month (mdn)	21	0
Number of drug classes used in preceding month (mean)	5.1	2.0
Daily or more frequent injecting in preceding month (%)	74	6
Overdosed in preceding 3 months (%)	23	0

Criminal activity

<u>Criminal activity in preceding month</u>	<u>Baseline</u>	<u>3mths</u>
(N=35)		
Property crime	46	6
Drug Dealing	11	0
Fraud	20	0
Violent crime	9	0
Any crime	51	6

Psychiatric distress

(N=35)	<u>Baseline</u>	<u>3mths</u>
Current Major Depression (%)	23	9
SF-12 mental health score (mean)*	31.4	41.4

Physical health

(N=35)	<u>Baseline</u>	<u>3mths</u>
SF-12 physical health score (mean)*	43.9	51.3
Current injection-related health problems (%)	89	9

ODYSSEY HOUSE ATOS 12-MONTH DATA

Baseline sample n=38

Proportion followed up at 12 months = 30/38= 79%

NB: The baseline data presented below is based on n=30

Treatment status and abstinence rate at 12 months (n=30)

Still in index treatment (%)	N/A
Currently in treatment, but not the index treatment (%)	40
Any intervention since baseline (%)	60
Abstinent from heroin for month preceding 12mth follow-up interview (%)	63

Drug use

(N=30)	<u>Baseline</u>	<u>12mths</u>
Heroin use days in preceding month (mdn)	20.5	0
Number of drug classes used in preceding month (mean)	4.8	3.1
Daily or more frequent injecting in preceding month (%)	77	3
Overdosed in preceding 3 months (%)	20	7

Criminal activity

<u>Criminal activity in preceding month</u>	<u>Baseline</u>	<u>12mths</u>
(N=30)		
Property crime	40	17
Drug Dealing	13	3
Fraud	20	3
Violent crime	3	0
Any crime	47	17

Psychiatric distress

(N=30)	<u>Baseline</u>	<u>12mths</u>
Current Major Depression (%)	23	13
SF-12 mental health score (mean)*	32.0	37.9

Physical health

(N=30)	<u>Baseline</u>	<u>12mths</u>
SF-12 physical health score (mean)*	41.9	51.6
Current injection-related health problems (%)	87	20

* NB: Higher SF-12 scores are indicative of better health

DISCUSSION :

ODYSSEY HOUSE SAMPLE AND ODYSSEY HOUSE ATOS SAMPLE AND RESULTS

Demographic comparisons of the two samples were similar while the average age of the population has decreased since 1985. The age range has consistently been between 23-29 years of age over that period of time.

In both samples there were high levels of polydrug use. In the ATOS sample the participants exhibited greater levels of polydrug use than the MT and DTX groups, used more drug classes, and became intoxicated at a younger age. The ATOS Odyssey House samples mean age at 1st intoxication was 13.1 years, which is consistent with previous Odyssey House surveys (Pitts, 2001).

In both samples rates of criminal activity remained steady but high. There was consistency between the samples relating to educational attainment, with the mean length of school education 10.1 years in the ATOS sample, which is consistent with the data from the Odyssey House sample, which showed a decline in educational attainment over the period 1985 to present.

Employment rates for both samples were relatively low, with almost half of both samples employed but whose rates of remuneration were low. In addition, both samples received income through government benefits and illegal activity. The Odyssey House sample showed an overall decline in intellectual functioning, with the FSIQ having fallen almost a standard deviation since 1985.

The Odyssey House ATOS sample also demonstrated high rates of at risk behaviour with 54% having ever overdosed on heroin and 37% in the last 12 months. This sample had higher incidences of previous treatment and high incidences of levels of depression (26%), PTSD (40%), ASPD (79%) and BPD (61%).

Despite the data from the 2 samples which show a profile of participants which has deteriorated over time to exhibit the worst of the three interventions examined through ATOS, the outcomes for the Odyssey House ATOS sample were impressive. From baseline levels there has been a steady improvement across all indices with declines in drug use, drug classes used, injecting behaviour, improvements in rates of non fatal overdoses, remarkable declines in criminal activity of all types, decreases in rates of depression, improved mental health rates and general health overall, and significant improvements in injection related health problems.

CONCLUSION

Australia has the distinction of having a well co-ordinated national strategy to deal with its alcohol and other drugs problem. The strategy is underpinned by the concept of harm minimization/harm reduction, which is designed to reduce the adverse health, social, and economic consequences of drug use to the community and the individual without eliminating use necessarily. Increases in strategies to promote this concept, i.e. needle syringe programs and alternative pharmacotherapies has had beneficial effects. Consumer and self-help groups such as Narcotics Anonymous, New South Wales Users and AIDS Association (NUAA), and the Australian Intravenous Drug League (AIVDL) have had their genesis, or experienced tremendous rates of growth since the onset of the National Campaign Against Drug Abuse (NCADA) and National Drug Strategy. All of the above factors have impacted upon the drug using population, agencies designed to provide services to them, and their market share.

Tertiary services such as Odyssey House McGrath Foundation have been impacted by NCADA/NDS and the aforementioned factors, somewhat paradoxically. NCADA/NDS has provided much needed funds to the states and territories, and more recently non-government organisations in particular, to offer a range of alcohol and other drugs services. Participants in therapeutic communities in general, and Odyssey House in particular, have deteriorated in their functioning within specific domains. This has been demonstrated robustly through the in-house data from Odyssey House, and reinforced through the baseline and follow up indices from the Australian Treatment Outcome Study.

Criminal convictions within the population are high, while educational attainment is relatively low. Intellectual functioning has declined and employment rates are poor. Patterns of drug use are more severe than in other modalities, as is age at first intoxicification. Participants are starting their drug use younger and taking greater risks when doing so as evidenced by the rates of non-fatal overdoses within the Odyssey House ATOS sample. While the Odyssey House ATOS sample was a pure heroin using group, in-house data indicates a shift in drug using patterns to a younger group who are using amphetamines and marijuana increasingly, and heroin less. This factor has significance due to concerns about violence, aggression, and psychological functioning within this group (Hando and Hall, 1993). Greater levels of psychiatric distress and depression, as well as the prevalence of ASPD, BPD, and PTSD were all reported at higher rates of prevalence than other interventions within the ATOS. Despite these factors which prognosticate negatively for outcomes, the Odyssey House ATOS sample showed continuing rates of improvement across all indices at 3 and 12 months follow up!

This confirms the fact therapeutic communities in general, and Odyssey House in particular provide services to the most severely damaged of the clinical drug using population when compared to other modalities including alternative pharmacotherapies/methadone, and detoxification. Odyssey House participants have shown impressive rates of improvement across all indices in the ATOS study, despite the severe impairments of the participants.

In response to the apparent deterioration of client profiles at Odyssey House, we have made adjustments within the environment without adversely affecting the therapeutic community culture. Staff has taken a more hands on role in the performance of daily procedures and overall supervision of resident activities than before. This had been done effectively while the therapeutic concept of self-help has been retained.

Greater emphasis upon earlier educational tuition in mathematics and English has taken place, while life skills training has been included. Educational activities are designed to support each individual's vocational aspirations through training in computer skills, woodworking, clerical skills, food preparation, and Screenprinting as part of daily job training. In addition there is a specific job training seminar series, which focuses on matching skills with jobs, interviewing techniques and focused job search.

Our younger population has required greater recreational activities which includes participation in local sporting competitions and activities.

We have recognised the need to provide a range of services to meet the legitimate needs of our resident population. As a result we have established services to augment our therapeutic community, i.e. Detoxification, short term residential, Parents and Children's program, and After Care.

In many cases these services were developed through our interaction with the corporate community who recognised the value of our services and supported them through substantial financial support.

The results of the ATOS vindicate the efficacy of the therapeutic community at Odyssey House. The severity of the problems experienced by this population is commensurate to the time they may need in treatment in order to make gains in a number of treatment domains. These gains have shown to be significant and have cost benefit and cost effectiveness ramifications. This is especially notable when it has been reported each resident in Odyssey House cost society on average \$185,000 in the year prior to their entry into treatment (Pitts, 2001).

The severity of the problems demonstrated in the RR group at Odyssey House has relevant resource implications. It needs to be recognized by Commonwealth and State governments, and their funding arms, the therapeutic community is an efficacious intervention which produces salient ~~ev~~ evidenced based+ outcomes. Therefore it is imperative resources are allocated to this intervention which assists it to continue to meet the multivariate clinical needs of this most difficult and challenging population!

Odyssey's population are those who have suffered the most severe adverse health, economic, and social consequences of their drug use. Therapeutic communities, like Odyssey House, cannot impact in any major manner on macro forces which support drug use in any community. Individual correlates of compulsive/intensive/dependent use of substances are well documented and recognized; a link to criminal activity; loss of employment and unemployability; deteriorated interpersonal relationships; and a focus on drug seeking and using activities and peers. The therapeutic community can assist an individual to process, deal with, and work through many of these issues in a safe environment, and promote the acquisition of more adaptive coping skills and strategies.

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