

# The Evidence Framework for Residential Treatment

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# Historical foundations

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- The roots of the contemporary therapeutic community lie in the self-help movement and mutual-aid fellowship (Broekaert, Vandervelde, Soyez, Yates & Slater, 2006; DeLeon, 1997; Rawlings & Yates, 2001)
- Continuation of a long history of recovery groups.
- Interest and support of the medical fraternity and academics, and in the UK and other parts of Europe in early years.
- TC practice merged with social psychiatry through the innovative practice of Jones, Laing, Clarke, Mandlebrote, Christie and others (Rawlings & Yates; Yates, 2010).
- TCs and residential treatment also met with suspicion and rejection by many in mainstream medical addiction treatment.
- Use of pharmacotherapies caught up in debate, polarising the treatment field.

# The debate

‘Recovery’ group, at its extreme, argues that methadone treatment involves the substitution of one addiction for another or, at best, should be seen as a short term tool to be used sparingly.



Opposing position stresses the large scientific evidence base in support of its use and tends to favour the maintenance method, which, at its strongest, understands methadone as a sort of ‘insulin’ that alleviates the ‘diabetes’ of addiction, metaphorically speaking.

# Pharmacotherapy = “palliative care”?

- David Best, VAADA conference, alluded to what has become termed as “palliative care” – which reflects a situation of increasing numbers moving into pharmacotherapy treatment, and few moving through and leaving it.
- Is there really no scientific evidence for ‘abstinence’ or have we become so queasy about a term that could be seen as somewhat politically incorrect, that we no longer use it?
- Has Addiction Medicine lost direction in terms of recovery pathways?
- Is abstinence the only form of recovery?

# Research design

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- RCT not easily utilised in TCs.
- Not as simple as adding or subtracting components – like medication – because the TC is complex and involves so many factors and interventions.
- Not always easy to isolate the one aspect of treatment that could be assumed ‘works’.
- In any event, that one thing might only work for that person in that situation at that time – and another factor may work at another time.

# Research design

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- The TC studied and evaluated for over 40 years.
- Majority of evidence points to the fact that for those who complete treatment, there is a profound impact on both drug using and lifestyle behaviours.
- Also importantly, there is ample evidence of long term benefit even for those who do not complete treatment, but who undertake a period of rehabilitation, even if they are not 'graduates'.

# Research design

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- One factor repeatedly associated with better treatment outcome is longer period of treatment (Hubbard et al, 1997; Gossop et al, 1999; Flynn et al, 2003; Hubbard et al, 1989; Simpson et al, 1997).
- What is also important is cause of program separation – ie graduation or successful completion of program stages shown to be important – independent of program length and retention rate per se (Toumbourou & Hamilton, 1993).
- Therefore, retention needs to be seen in the context of intended treatment length.

# Outcome studies

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- Retention of at least 3mths shown to have better outcome in US studies (Simpson, 1997).
- UK studies show better outcome amongst those who stayed 90 days or more **as well as** those who stayed 28 days or more in shorter programs (>3mths) (Gossop et al, 1999).



# Short vs. Longer term programs at 24mths

- No difference between short or longer-term programs in either current heroin abstinence (72% vs. 70%) or daily use (10% vs. 13%).
- No significant difference between males and females in proportions who were heroin abstinent at 24mths (69% vs. 74%), or who were daily heroin users (12% vs. 12%).
- The large decline in heroin use marked at 3mth follow-up, and overall proportion reporting current heroin abstinence remained constant at each subsequent follow-up point.
- Of those who had been heroin abstinent at 12mth interview, 84% reported heroin abstinence at 24mth (Simpson, 1997).

# TC treatment

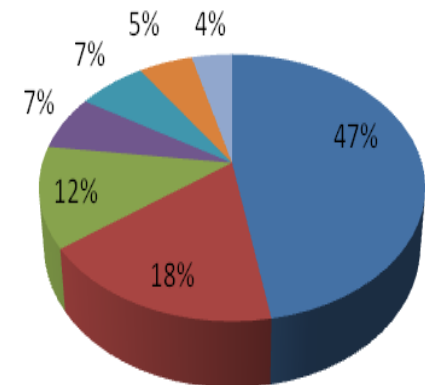
Similar dropout rates to other medical conditions, such as diabetes, asthma and hypertension (around 50%).

Substance use disorders require similar long-term treatment to other medical conditions, and that they will also suffer from similar drop-out rates (McLellan, O'Brien & Kleber, 2000; O'Brien & McLellan, 1996; White, 2006).

TCs at the forefront of providing services to clients with co-occurring/co-existing disorders with 50%-80% of TC clients having a co-occurring disorder.

## Historical Diagnoses: Salvation Army Therapeutic Communities

■ Depression ■ Bipolar Disorder ■ Anxiety ■ PTSD  
■ Schizophrenia ■ Psychosis ■ Borderline PD



# TC populations

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- Evidence suggests that TCs attract clients with complex behaviours and problems.
- 2006-07 National Minimum Data Set shows alcohol most common principal drug of concern reported by clients entering residential treatment (44% of episodes), followed by amphetamines (22%), cannabis (21%) and heroin (9%).
- ATOS study found mean length of heroin use 9.2 (SD 7.0, range <1-31) yrs. TC residents in sample (n=100) had used mean of 9.6 (SD 1.4, range 5-11) drug classes in their lives (Darke et al, 2006).

# Efficacy of the model

- Effectiveness of the TC model has been shown in positive outcomes for drug use, criminality and employment in single-site (De Leon, 1987, 1989; De Leon & Rosenthal, 1989) and multi-site studies employing pre-post designs (Hubbard, Craddock, Flynn, Anderson & Etheridge, 1997).
- Their efficacy is supported by evidence based research in Australia (ATOS, 2002; Eassop et al, 2000; Guydish, 1999; Toumborou et al, 1994) and in the US through the Drug Abuse Treatment Outcome Study (DATOS).
- This study showed major reductions in all types of drug use (66% reduction in cocaine and heroin, 50% in weekly or frequent use of alcohol and cannabis, Hubbard et al, 1997).

# Darke, Williamson, Ross & Teesson, 2006

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- Australian study to determine levels of sustained heroin abstinence, current drug use, and drug-related problems of residential rehabilitation (RR) admissions 24 months after entering treatment.
- Longitudinal cohort study of 100 heroin users admitted to short-term (1 month) or long-term (3-6 months or longer) RR.
- 18% successfully graduated, 47% self-discharged, and 30% were discharged.
- Postindex treatment exposure was widespread (82%), with additional RR the most common treatment.

# Outcome studies

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- At 24 months, 71% were heroin abstinent over the month preceding interview, and 18% reported heroin abstinence over the entire follow-up period.
- Large declines in levels of recent needle borrowing, crime, psychopathology, and improvements in global and injection-related health.
- Independent predictors of continuous heroin abstinence were being female and successful graduation from the index program. These were independently associated with abstinence, whereas having had post-treatment MT exposure was related to reduced odds of abstinence.
- The study confirms the effectiveness of RR and highlights the impact of program graduation.

# Outcome studies

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- Despite poor clinical presentations, Australian, US and UK studies show good outcomes for TC treatment.
- Gossop et al (1999) in UK based National Treatment Outcome Study (NTOS) reported ½ TC clients abstinent from heroin in period immediately preceding 12mth follow-up, as were 70% of those from Australian study (Darke et al, 2006).

# Prison-based TCs

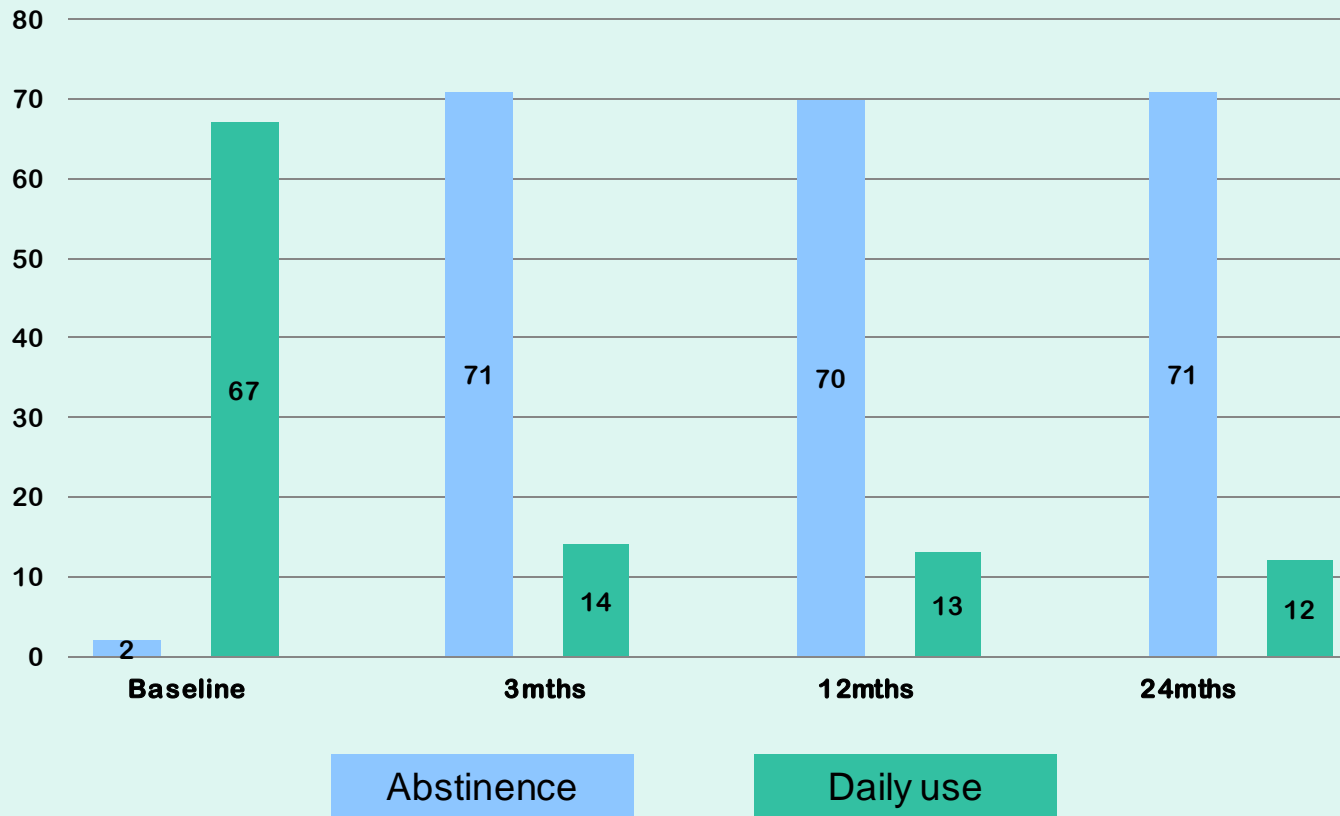
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- Prison-based TC programs may vary in their design but most have a set of core commonalities that define them in a general sense.
- These often include :
  - separation from the general prison population
  - highly structured and hierarchical group environment
  - a safe and secure environment where participants feel comfortable opening up emotionally and expressing their feelings



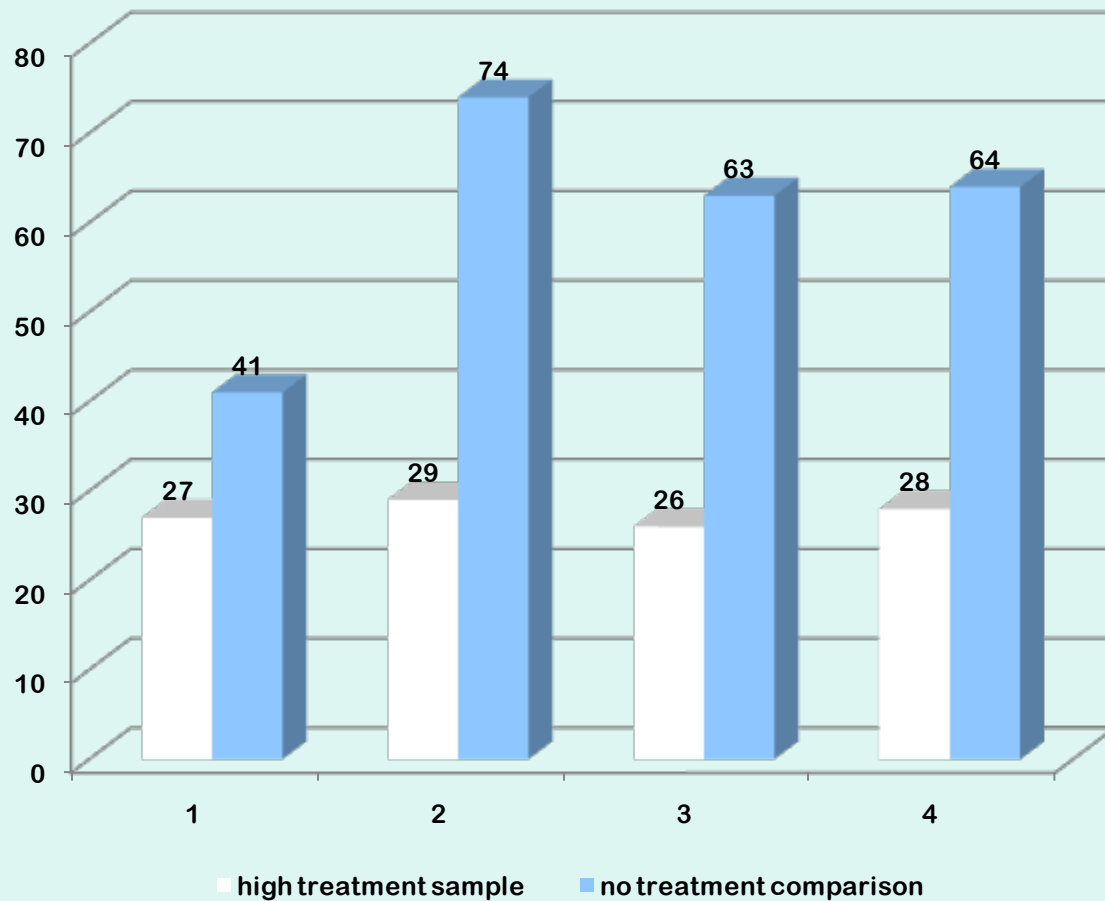
# Outcomes for TC treatment

Heroin use at baseline, 3, 12 & 24mths



In addition to reductions in heroin use, there was also a substantial reduction in the use of amphetamines, cocaine, cannabis, and benzodiazepines (Simpson, 1997).

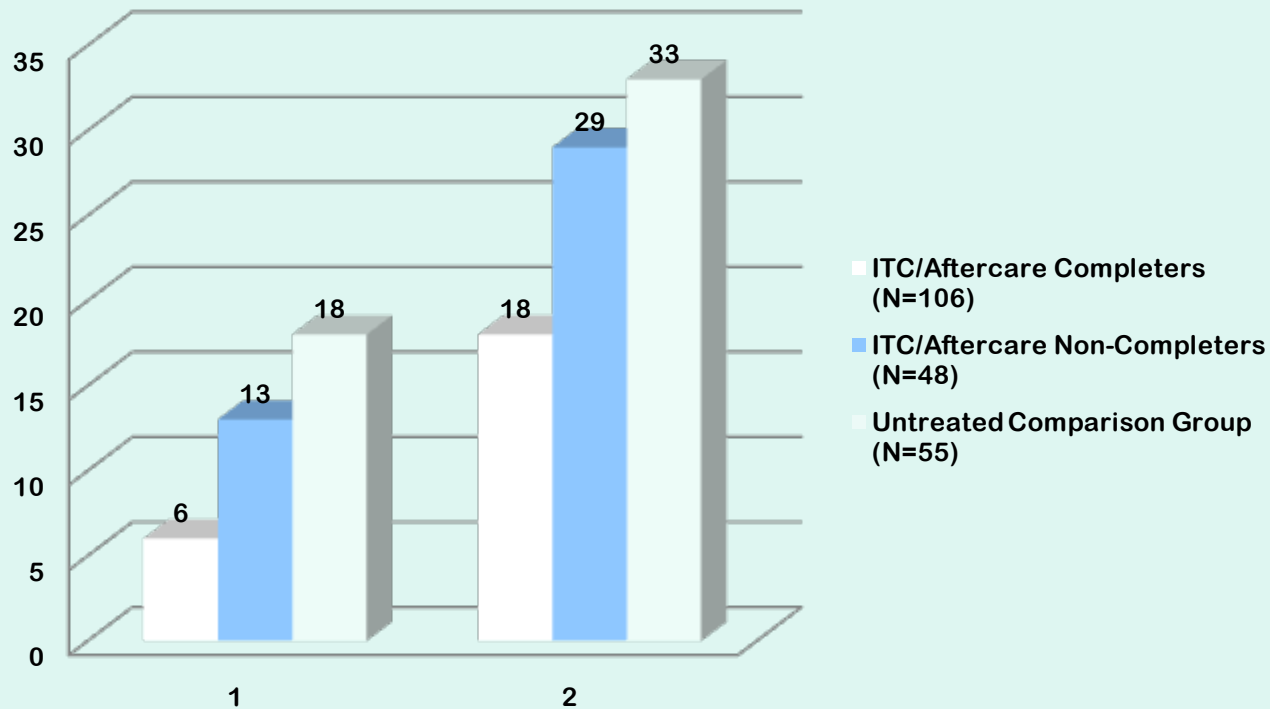
# Outcome studies of Prison-based TC treatment



1. % arrested 2 yrs+  
Stay'n Out Program  
NY
2. % imprisoned 3 yrs  
Cornerstone (Oregon)
3. % gaoled 1 yr Amity  
(San Diego, California)
4. % arrested 18 mths,  
Amity

# Outcome studies of Prison-based TC treatment

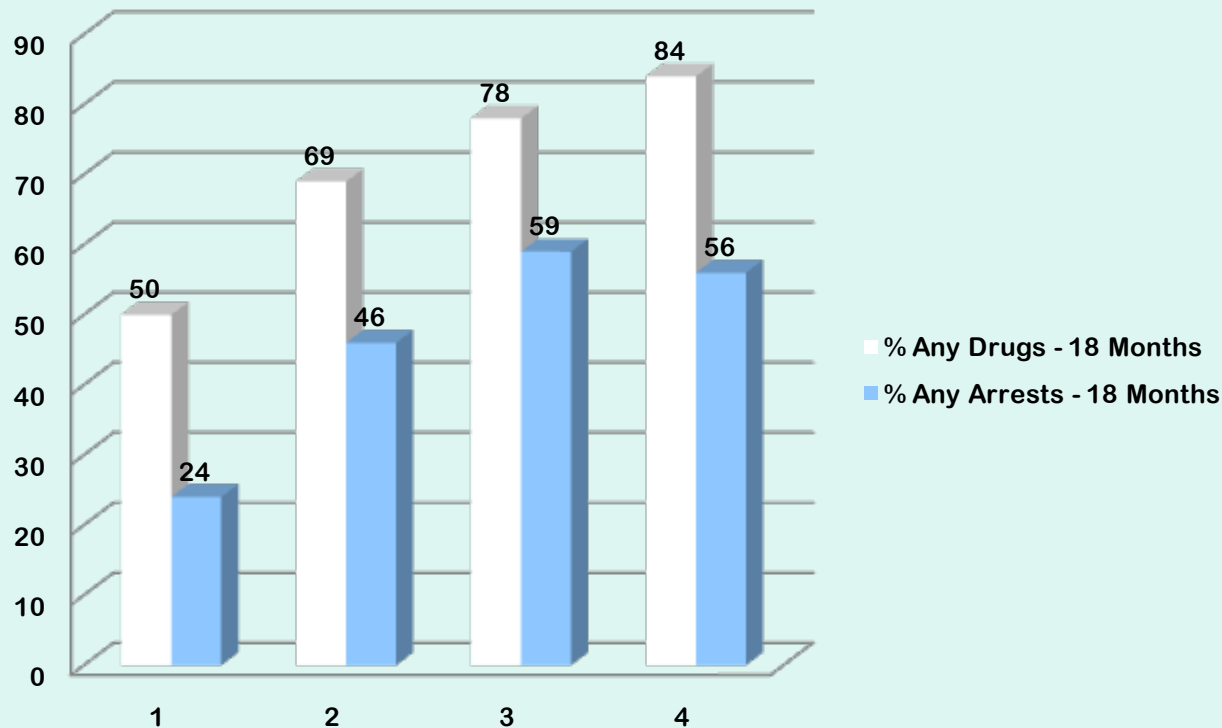
**Texas In-Prison Therapeutic Community (ITC)  
Treatment: 12-Month Arrest Rates\***  
*(Lipton, 1996)*  
*(D. Simpson & K. Knight, Texas Christian University)*



1. % arrested in months 1 – 6
2. % arrested in months 6 - 12

# Outcome studies of Prison-based TC treatment

**Delaware Therapeutic Continuum:  
18-Month Outcomes**  
*(J. Inciardi, U of Delaware, Jan 1998)*



1. Prison TC + Aftercare  
(N=87)

2. Prison TC Completers  
(N=131)

3. Prison TC Dropouts  
(N=61)

4. Control (No TC;  
N=151)

# Cost benefits of TC treatment

- ATCA 2001 study undertaken on single day across member agencies to ascertain costs of respondents' drug use to the community in preceding year.
- Costs calculated against medical, legal and welfare services, utilising formula calculated by Ernst and Young (1996).
- Respondents (n=345) estimated daily use of drugs in 12 mths prior at \$302.03 or approx. \$110,242.00 per person per year.
- Yearly total for whole cohort (345) \$46,742,608.00 (Pitts & Yates, 2010).
- Further costs include crime costs (estimated cost of burglaries and other crimes to support drug use), law enforcement, health and welfare costs.

# Cost benefits of TC treatment

Cost Centre	Overall cost per annum
Drug purchasing (crime costs)	\$46,742,608.00
Enforcement and Court costs	\$10,302,500.00
Healthcare costs	\$1,211,952.00
Welfare Benefits	\$4,510,272.00
<b>Total</b>	<b>\$62,767,332.00</b>

Pitts & Yates, 2010

- Even based on the estimated treatment cost of \$98.00 per day (Darke et al, 2006) the overall cost of treatment for the 345 people in this study for one year would be \$12,340,650.00.
- Therefore TC treatment for this cohort would provide a **savings of \$50,426,682.00 over a 12mth period – or \$146,164.30 per person per annum. This is a savings of \$400.00 per person per DAY!**

# Treatment as turning point

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- Laub & Sampson (2004) study of delinquent adolescents through to 70 years of age.
- Change occurred where relationships were successful and employment was stable.
- Confirms value and need to address psychosocial issues which surround delinquent behaviour.
- Hallmark of therapeutic community treatment.
- Treatment can be a turning point, particularly if it provides the window for change and the resources to sustain and support recovery in a real-life situation, are available.

# Desistance predictors

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- Stress concept of **Adult Growth**.
- Recognises that while substance use is a chronic and relapsing condition, **it is not a life sentence**.
- There is the concept of ‘turning points’ or ‘windows of opportunity’ which are psychological and social – not biochemical – and **desistance predictors**.
- **Desistance**, the opposite of persistence, simply mean ‘quitting’ – stopping use. Desistance is a process which takes place over time.



# End of careers study

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- Examined the heroin, cocaine and alcohol using careers of 228 former, with majority (187) working in the addictions field.
- On average, group had used for 7 years, had an average of 2.6 treatment episodes and 3.1 periods of abstinence.
- Heroin abstinent for an average of 7 years at the time of completing the survey (Best et al, 2008).

# What finally enabled participants to give up?

	<b>Not at all</b>	<b>A little</b>	<b>Quite a lot</b>	<b>A lot</b>
<b>Physical health problems</b>	<b>19.6%</b>	<b>42.4%</b>	<b>15.2%</b>	<b>22.8%</b>
<b>Psychological health problems</b>	<b>23.4%</b>	<b>18.1%</b>	<b>22.3%</b>	<b>36.2%</b>
<b>Criminal justice</b>	<b>30.4%</b>	<b>26.1%</b>	<b>19.6%</b>	<b>23.9%</b>
<b>Family pressures</b>	<b>36.0%</b>	<b>24.7%</b>	<b>21.3%</b>	<b>18.0%</b>
<b>Work opportunities</b>	<b>76.55</b>	<b>9.4%</b>	<b>9.4%</b>	<b>4.7%</b>
<b>Support from partner</b>	<b>72.6%</b>	<b>15.55</b>	<b>6.0%</b>	<b>6.0%</b>
<b>Help from friends</b>	<b>37.9%</b>	<b>28.7%</b>	<b>14.9%</b>	<b>18.4%</b>
<b>Tired of lifestyle</b>	<b>6.3%</b>	<b>4.2%</b>	<b>13.55</b>	<b>76.0%</b>

Best et al, 2008

# What enabled people to give maintain abstinence?

	<b>Not at all</b>	<b>A little</b>	<b>Quite a lot</b>	<b>A lot</b>
<b>Support from partner</b>	<b>45.2%</b>	<b>20.0%</b>	<b>12.9%</b>	<b>21.9%</b>
<b>Support from friends</b>	<b>14.5%</b>	<b>21.1%</b>	<b>16.9%</b>	<b>47.6%</b>
<b>Moving away from drug using friends</b>	<b>16.1%</b>	<b>5.0%</b>	<b>18.0%</b>	<b>60.9%</b>
<b>Having a job</b>	<b>31.2%</b>	<b>17.8%</b>	<b>18.5%</b>	<b>32.5%</b>
<b>Having reasonable accommodation</b>	<b>10.3%</b>	<b>17.6%</b>	<b>26.1%</b>	<b>46.1%</b>
<b>Religious or spiritual beliefs</b>	<b>22.3%</b>	<b>11.4%</b>	<b>16.3%</b>	<b>50.0%</b>

Best et al, 2008

# TCs as turning points

- Only formal treatment service noted by this group as providing help to **become** abstinent was residential rehabilitation (16.9%).
- In addition, mutual-aid groups were cited by 29.3% as a key factor in achieving abstinence and by 41.6% as a key factor in **staying** completely abstinent.
- These responses also fit with the fact that residential services, and particularly therapeutic communities, see their role as a unique treatment episode which 'kick-starts' the recovery process, most often working in concert with the mutual-aid fellowships to assist the person to maintain and sustain their recovery.

# TCs as turning points

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- Of particular importance are psychological factors – belief systems, self-esteem and coping skills – deriving from or combined with the support of rehabilitation or mutual-aid which, it would seem, can act as a significant turning point in the addiction career and act as a catalyst for abstinence.
- Most importantly, both these forms of assistance provide ongoing support in the recovery journey.

**“The TC process is one of social learning and social development. A basic tenet of the TC is that substance use is a complex condition combining social, psychological, behavioural and physiological dimensions.**

**It is a symptom of underlying social, psychological and/or behavioural issues which need to be addressed if recovery is to occur”**

**(Gowing, Cooke, Biven & Watts, 2002).**