



# **PATHWAYS THROUGH TREATMENT**

A MIXED-METHODS LONGITUDINAL  
OUTCOMES STUDY OF COOLMINE  
THERAPEUTIC COMMUNITY

KATE BABINEAU  
ANITA HARRIS



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# EXECUTIVE SUMMARY





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## BACKGROUND TO THE STUDY

In recent years, the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)<sup>1</sup> published Guidelines for the Evaluation of Drug Prevention (1998), while the World Health Organization (WHO) and the United Nations Drug Control Programme (UNDCP) both emphasised the need for rigorous drug treatment programme evaluation.<sup>2</sup> Nationally, the Research Outcome Study in Ireland Evaluating Drug Treatment Effectiveness (ROSIE), commissioned by the National Advisory Committee on Drugs (NACD), was the first national longitudinal drug treatment outcome study in response to these international recommendations.<sup>3</sup> In 2011, CTC undertook a longitudinal outcome study in their primary treatment services to contribute to the national and international literature surrounding drug and alcohol treatment evaluation.

The complete findings from this study are presented in the full report entitled 'Pathways through Treatment: A mixed methods longitudinal outcomes study of Coolmine Therapeutic Community'. In this executive summary, an overview of the quantitative findings is presented to highlight the broad trends identified in the numeric data. The qualitative data herein is summarised briefly and analysed thoroughly in the main report.

## METHOD

A mixed methods research design was particularly suited to the study's aims. First, it permitted a broad, on-going examination of treatment retention, progress, and outcomes among a larger sample to investigate salient patterns and trends. Second, it facilitated an in-depth exploration among a smaller sample of the different pathways individuals take through treatment. A two-tiered, concurrent data gathering approach enabled the collection of both qualitative and quantitative data over a 24-month period.

Baseline quantitative data were collected at intake to a CTC primary treatment service between February 2011 and February 2012 using the Treatment Outcome Profile (TOP).<sup>4</sup> Four follow-up data collection phases were staggered, depending on the date of the initial baseline interview, with the aim of following-up at six month intervals. A total of 144 clients participated in the baseline quantitative survey. Participants ranged in age from 18 to 50 years. The average age at entry to treatment was 30 years, with the average age for males (31 years) being slightly higher than for females (28 years). More than half of the respondents (53%, n=77) reported problem use of more than one substance, although 71% reported opiates as being the primary problem drug of use.

Qualitative data collection occurred in four stages: treatment intake, 6 months, 12 months and 18 months from the period March 2011 to June 2013. In total, 86 semi-structured interviews were conducted with 28 clients. A purposive sampling strategy was used and all participation was voluntary. Qualitative participants ranged in age from 20 to 47 years and the average age was 32 years. A total of 16 (58%) were male and 12 (42%) were female. There was a near equal representation from three CTC primary treatment programmes where 10 were living in the Lodge, 8 were living in Ashleigh House and 10 were engaged with the DFDP service. Poly-drug use was commonly reported by participants. However, the majority of qualitative participants (86%, n=24) reported opiates as their primary problem drug.

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<sup>1</sup> European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). (2011). 2011 Annual Report on the State of the Drugs Problem in Europe.

<sup>2</sup> Marsden, J., Farrell, M., Bradbury, C., Dale-Perera, A., Eastwood, B., Roxburgh, M., & Taylor, S. (2008). Development of the treatment outcomes profile. *Addiction*, 103(9), 1450-1460.

<sup>3</sup> Comiskey, C., Kelly, P., Leckey, Y., McCullough, L., O'Duill, B., Stapleton, R. & White, E. (2009). The ROSIE study: Drug treatment outcomes in Ireland. Stationery Office.

<sup>4</sup> Treatment Outcome Profile (TOP) measures change and progress in key areas of the lives of people being treated in drug and alcohol services. Developed by the National Treatment Agency for Substance Misuse (NTA) in the UK it produces outcome data that can be used to evaluate treatment effectiveness. TOP consists of 20 simple questions focusing on the following areas - substance use, injecting risk behaviour, crime, health and quality of life.



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## LIMITATIONS

One main limitation of the current study is that the data presented here represents only those clients who were tracked throughout the life of the project. The overall retention rate for the study was 72% for the 24 month period. While this is a solid figure for a longitudinal study, there is an unavoidable loss of data from those participants who could not be tracked for continued participation. A further limitation is that TOP questionnaires are time specific and participants are asked to recall data in relation to a defined period of 30 days prior to interview. In addition, data collected through TOP is self reported and thus, could be susceptible to social desirability bias.<sup>5</sup> Finally, the data is from a sample at a specific treatment centre and as such, the findings are not generalisable to treatment experiences either nationally or abroad. Despite these limitations, this study makes a valuable contribution to the growing body of literature on drug treatment and evaluation.

## RESULTS

### SUMMARY OF KEY FINDINGS

- 72% (n=80) of retained participants reported to be free from illicit drug use 24 months after intake to a CTC service.<sup>6</sup>
- 62% (n=68) of retained participants were still engaged with CTC 6 months after intake.
- 36% (n=40) of CTC retained clients completed the full CTC programme including primary treatment, integration, and aftercare programme through to graduation.
- 85% (n=34) of graduates reported to be illicit drug free at 24 month follow up.
- 62% (n=39) of participants who exited treatment early<sup>7</sup> reported to be illicit drug free at the 24 month follow up.
- The average length of programme participation before exiting treatment early was 4.4 months.
- At the 24 month mark, self-discharge was highest among females in residential treatment (53%, n=16).
- The average length of programme engagement prior to self-discharge was 4.7 months.
- At the 24 month mark, programme discharge was highest among males in residential treatment (29%, n=15).
- The average length of time engaged in the service prior to discharge due to violation of protocol was 4.1 months.
- 5% (n=5) of participants who exited treatment early re-engaged in CTC during the course of the study.
- At intake, female participants scored lower on self-reported psychological health and well-being scales as compared to their male counterparts.
- Overall, participants reported improvements in physical health, psychological health and well-being across all three CTC treatment programmes.
- Employment rose from 3% (n=4) at treatment intake to 25% (n=28) at 24-month follow up.
- Engagement in education rose from 2% (n=2) at treatment intake to 17% (n=18) at 24-month follow up.
- Engagement in criminal activity in the previous 30 days fell from 9% (n=12) at treatment intake to 2% (n=2) at 24-month follow up.
- 22% (n=30) of participants reported acute housing problems at treatment intake and this increased to 23 % (n=25) at 24-month follow up.

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<sup>5</sup> Comiskey, C., Kelly, P., Leckey, Y., McCullough, L., O'Duill, B., Stapleton, R. & White, E. (2009). The ROSIE study: Drug treatment outcomes in Ireland. Stationery Office. That said, the ROSIE study noted that extensive literature on self-reporting information about drug use and criminality was both valid and reliable.

<sup>6</sup> Percentages have been rounded off to the nearest whole number.

<sup>7</sup> 'Exited treatment early' refers to participants who are asked to leave the community due to significant violations of protocol, such as continued breach of groundrules, termed early discharge. It also includes participants who self discharge (those who leave the community early through personal choice).



## PROGRAMME RETENTION AND SUBSTANCE USE

### RETENTION IN TREATMENT

At treatment intake all 144 participants were actively engaged in one of CTC's three programmes. At the six month follow up 75.7% (n=109) baseline participants were retained in the study. Of this sample, 62.4% (n=68) were still engaged in treatment, 21.1% (n=23) had self-discharged and an additional 7.3% (n=8) were discharged due to violation of protocol. An additional 6.4% (n=7) had left the programme and then after re-engaged, one client (0.9%) had graduated, and 1.8% (n=2) had returned to prison. At the final 24-month data collection phase, 77.1% (n=111) participants were retained in the study. Of this final sample, 36% (n=40) clients completed the full CTC programme through to graduation. More than one third (35.1%, n=39) self-discharged and an additional 21.6% (n=24) were discharged by CTC. Of those who discharged early, 4.5% (n=5) re-engaged in the programme during the study and 2.7% (n=3) returned to prison. Figure 1 presents CTC's programme retention outcomes at 6 months, 12 months and 18 months.

**Figure 1**  
CTC programme engagement over an 18 month period<sup>8</sup>

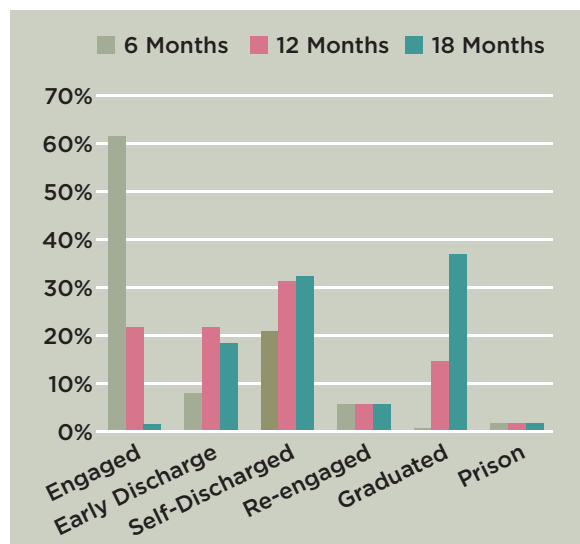


Figure 2 presents the overall programme retention at the end of the study.

**Figure 2**  
Overall programme retention at 24-months



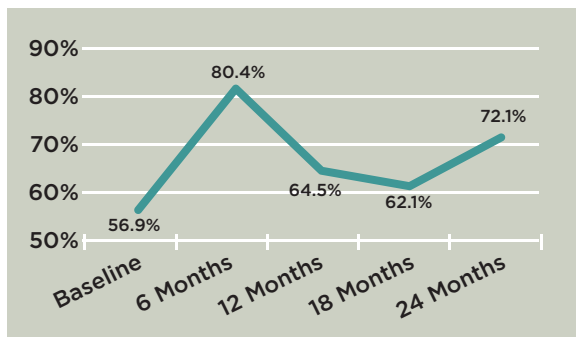
<sup>8</sup> Total numbers of participants varied according to retention rates. They are as follows: Baseline - 144 (100%); 6 Month - 109 (75.7%); 12 Month - 110 (76.4%); 18 Month - 103 (71.5%); 24 Month - 111 (77.1%).



**SUBSTANCE USE**

A majority (72.1%, n=80) of study participants reported no illicit drug use at the point when the final survey was administered. This was true for the majority of those who completed treatment (85%, n=34) but also for a large number of clients who discharged early (61.9%, n=39). Figure 3 shows the illicit drug-free status of clients during the two-year period.<sup>9</sup>

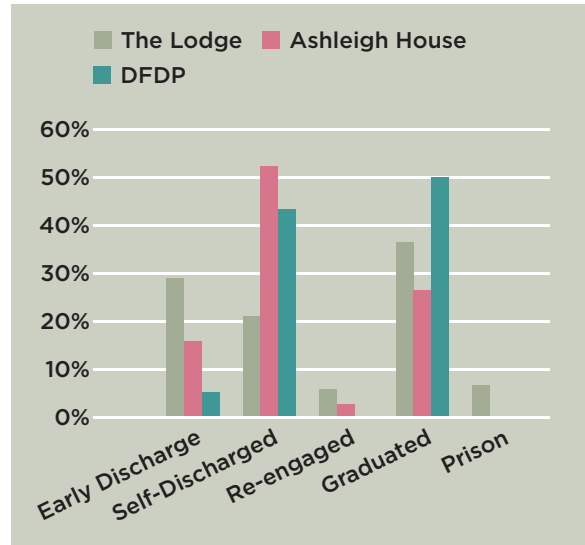
**Figure 3: Self reported drug free status over 24 months**



**TREATMENT OUTCOMES BY PROGRAMME**

Figure 4 presents the overall retention of participants in each of the three CTC treatment programmes. Upon examining engagement across the three programmes, one can see a similar trend to the overall data with regards to graduation and drug-free status at 24-months. Namely, the numbers of clients reporting illicit drug-free status was approximately double that of those who graduated. Some differences between programmes emerged as well. Ashleigh House had the lowest graduation rate at 26.7% (n=8). The Lodge had a graduation rate of 36.5% (n=19) and the DFDP had a graduation rate of 50% (n=9). Over half of the original cohort of women from Ashleigh House self-discharged (53.3%, n=16), as did 44.4% (n=8) of DFDP clients. Self-discharge was notably lower among male residential clients in the Lodge (21.2%, n=11) but discharge due to violation of protocol was the highest among this group (28.8%, n=15).

**Figure 4: Client programme retention at 24 months**



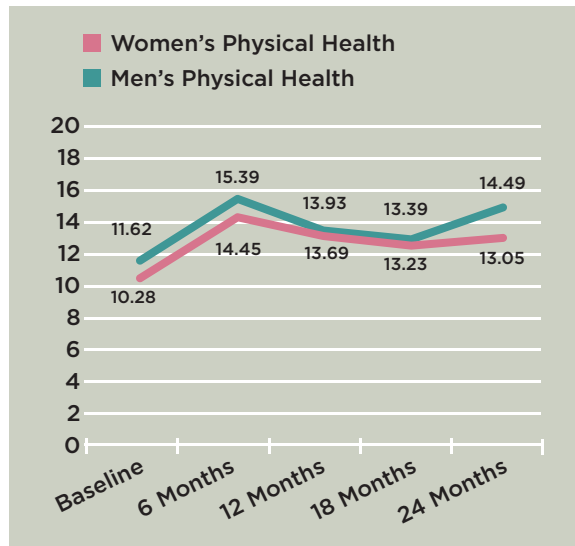
The discrepancy in retention and drug-free status between clients in DFDP and residential treatment should be interpreted with some caution, as the qualitative data uncovered a key difference between clients in these two programmes. Specifically, the majority of clients in the DFDP entered after completing a separate residential treatment programme and therefore, were entering treatment after a period of sobriety and with previously acquired knowledge of treatment programmes. Furthermore, qualitative data found that many were highly committed to actively practicing recovery, as they voluntarily opted for additional day treatment following a residential programme.

<sup>9</sup> At treatment intake, more than half of participants (82, 56.9%) are reported as drug-free. This reflects the timing of the survey and the nature of the question used to measure drug-free status, which assesses substance use in the past 30 days only. Many clients received the baseline survey after they had been in treatment for 30 days and thus, they are coded as 'drug free'.

## PHYSICAL HEALTH AND PSYCHOLOGICAL HEALTH

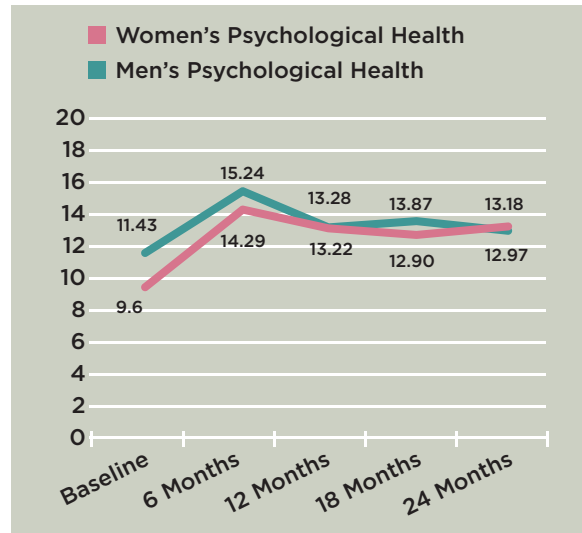
This study revealed self-reported improvements in physical health for both male and female participants over the life of the project. As shown in Figure 5, female participants' physical health remained lower than males' throughout the life of the project. However, both groups experienced visible increases in self-reported physical health during, and following, treatment.

**Figure 5: Physical health over 24 months: Mean scores**



As with physical health, there were notable improvements in self-reported psychological health over the life of the project. Analysis of baseline (intake) data revealed that female respondents' psychological health scores (M=9.60, SD=3.70)<sup>10</sup> were significantly lower than their male counterparts (M=11.43, SD=3.95) (t (128)=2.63, p=.10)<sup>11</sup>. Although there was a noted peak in psychological health at the 6 months mark, it was followed by a slow decline at 12 months, 18 months and 24 months. Both male and female participants reported improvement in their psychological health at the final 24-month data collection point when compared with intake.

**Figure 6: Psychological health over 24 months: Mean scores**



These improved health findings in the quantitative data were consistent with interview participants' accounts of their physical and mental health over the course of the study. While many reported on-going health problems, including in some cases serious and chronic co-morbidities such as HIV and Hepatitis C, most who remained drug-free stated during their final interview that their physical health was markedly better than prior to entering treatment. Positive mental health was often presented as something that had to be actively maintained through behavioural measures such as attending and participating in fellowship meetings, and adhering to a structured daily routine as rehearsed/defined within the TC approach. Female participants were more likely to explicitly report mental health issues, such as periods of depression, anxiety, self-harm, suicidal ideation and suicide attempts, than their male counterparts. While analysis revealed fluctuating mental health issues post-treatment for females, there was nonetheless a notable improvement in their psychological health at 24-months as compared with baseline.

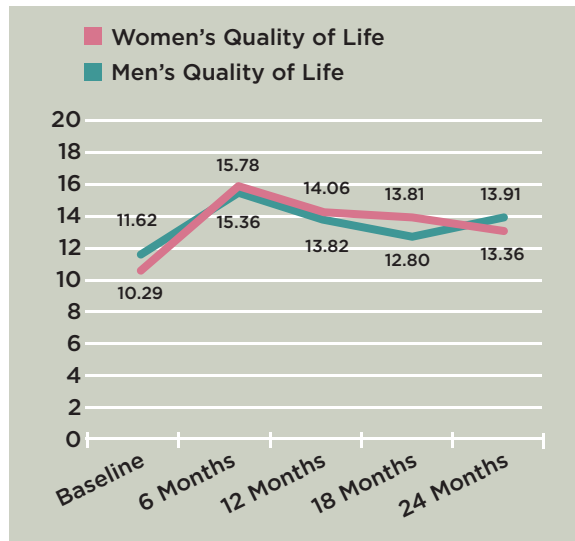
<sup>10</sup>M= mean average. SD = standard deviation  
<sup>11</sup> Refers to statistical significance.



## QUALITY OF LIFE

Analysis of self-reported quality of life revealed a similar trend as the health outcome variables. Intake data found that female respondents' quality of life scores (M=10.29, SD=3.70) were lower than their male counterparts (M=11.62, SD=3.95). Females demonstrated lower scores than males at intake, then a noted peak in scores at the 6-month mark, followed by a slight decline at 12 months and 18 months. Further analysis found that the final scores were higher at the final 24-month for both male and females than at intake.

**Figure 7: Self-perceived quality of life over 24 months: Mean scores**



Improvement in overall quality of life was also reflected in the qualitative data. While engaged in CTC, men and women in residential treatment reported varying experiences of daily participation in the TC structure and routine. Most of the women who had their children residing with them in Ashleigh House during their residential treatment programme noted challenges. While acknowledging that they would not have entered treatment without the option of on-site childcare, some women felt detached from the group-treatment experience when compared to those who did not have children in residence with them, as they struggled to balance parenting and participation in the full TC residential programme.

Post-treatment improvements in quality of life were reported by all participants. Establishing a routine, maintaining a household, moving away from full-time recovery-focused activities, (re)connecting with family, (re)building relationships with their children were all cited as sources of fulfilment, joy and self-esteem. Overall, participants aspired towards what they described as ordinary or everyday things, such as family contact, a home, children, a pet or the means to travel. The sense of hope extended beyond the material world to a more abstract, overarching sense of optimism that emerged from the narratives of drug-free participants.



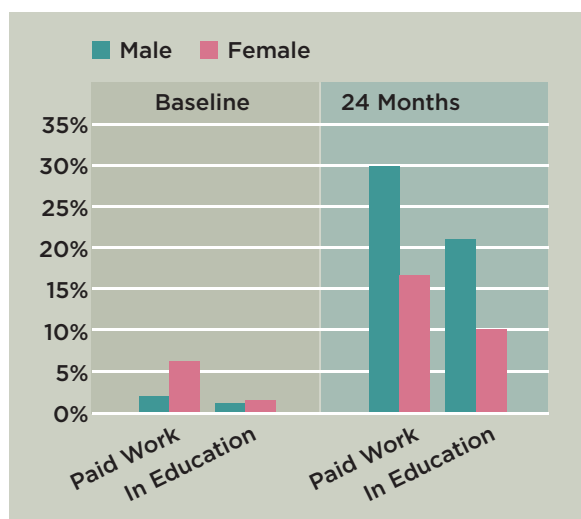


## EMPLOYMENT AND EDUCATION

Findings from the study revealed that clients were distinctly more active in their attempts to engage with education and the labour market after engaging with CTC. At intake, 3.5% (n=4, 3 female and 1 male) of survey participants were engaged in paid employment and 1.4% (n=2, 1 male and 1 female) were enrolled in an educational programme. As shown in Figure 8, this increased to 25% (n=28) in paid employment and an additional 17% (n=18) who returned to education at the 24-month period. Males were more likely to be in paid employment (30%, n=21) and education (21.4%, n=14) at the two year follow-up than their female counterparts. At the 24-month period, 17.1% (n=7) of females were engaged in paid employment and 9.8% (n=4) were in some type of formal education.

All participants expressed a desire to transition into employment. Maintaining abstinence was viewed as the most immediate and important goal and, for this reason, a considerable number expressed a preference for employment that was not overly demanding or stress-inducing. Of note, several qualitative participants gained employment in a drug and alcohol treatment service. Other participants reported being unable to secure employment due to their past criminal activity and this invariably became a source of frustration over time. Qualitative data revealed that the main difficulty experienced in securing paid employment was a lack of formal education qualifications. In turn, this led many participants to consider returning to education.

**Figure 8: Employment and education at treatment entry and 24 months**



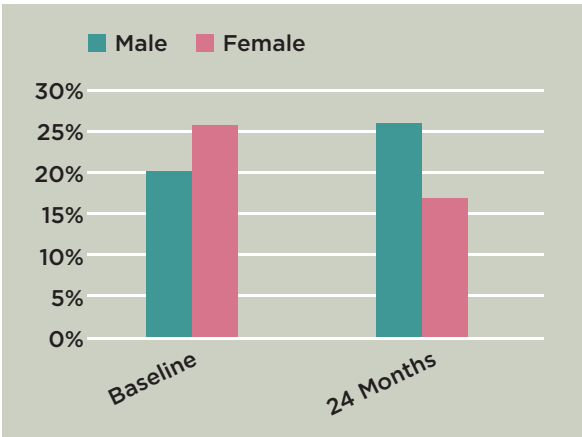


## HOUSING

Following treatment, clients reported varying levels of success with securing housing as shown in Figure 9. At intake, 21.7% (n=30) of participants reported acute housing problems during the month prior to entering treatment. This included 20% (n=19) of males and 25.6% (n=11) of females. The 24-month analysis revealed the overall figure had increased slightly to 22.8% (n=25), including 25.7% (n=18) of male participants and 17.1% (n=9) of female participants. This increase in reported housing difficulties may be related to the fact that many clients at intake had been engaged in CTC or another formal treatment service and so were not experiencing acute housing problems during that time. For others the temporary housing provided by residential treatment may have removed their acute housing issue. Of note, 23% of participants were in acute housing need 24 months after treatment engagement. The average length of time in treatment ranged from 4.1 months to 14 months, indicating that housing difficulties persisted for many clients over a length of time following exit from treatment.

The majority of the study’s qualitative participants relied on housing services for assistance with securing housing and many did find clean, safe, and comfortable places to reside. For others, the experience was challenging and far more precarious due to prior periods of homelessness and incarceration.

**Figure 9: Housing difficulties at treatment entry and 24 months**



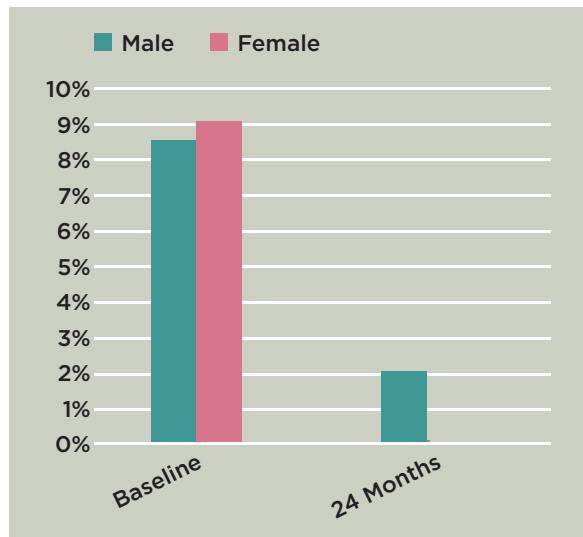


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## CRIMINAL ACTIVITY

Qualitative data revealed that most participants had a background involving some level of criminal activity. The vast majority reported having committed some form of crime to support a lifestyle largely focused on drug acquisition and use. This was particularly the case for male participants, most of whom had been incarcerated at some stage in their lives. The proportions of respondents reporting recent involvement in crime were substantially lower than lifetime involvement in crime. Intake analysis from the quantitative survey revealed 8.6% (n=12) of participants had committed a criminal act (i.e. drug-selling, shop-lifting, burglary, theft) in the previous 30 days. This included 8.3% (n=8) of male participants and 9.1% (n=4) of female participants. By the 24 month follow-up the number of participants who had engaged in criminal activity in the previous 30 days was reduced to 1.8% (n=2) as detailed in Figure 10 below.

**Figure 10: Criminal activity at treatment entry and 24 months**





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## CONCLUSION

The current study found an improvement in nearly all measured outcome areas over the two year longitudinal study. The total number of clients who were free from illicit drug use in the 30 days prior to survey administration rose from 56.9% at treatment intake to 72.1% (n=80) at 24 months. This implies that CTC's relapse rate (27.9%) is relatively low, as compared with TC rates recently reported in a systematic review (25-55%).<sup>12</sup> Self-reported health measures improved notably with regards to physical health, psychological health and quality of life. The total number of individuals engaged in paid employment increased from 3.5% at intake to 25% (n=28) at the 24 month follow-up period. The number of participants engaged in formal education increased from 1.4% (n=2) at intake to 17% (n=18) at the 24 month follow-up period. Improvements were also revealed in social functioning; individuals engaged in criminal activity decreased from 8.6% to 1.8% (n=2).

The majority of participants in the current study maintained an illicit drug-free lifestyle following their treatment at CTC. This was true for participants who graduated from the programme and included those who discharged early due to personal circumstances or a violation of protocol. Establishing a routine, relationship (re)building with family members and children, employment, and education were focal points for many. The data also uncovered some gender differences in treatment pathways, experiences and outcomes.

This executive summary has presented a brief overview of key findings of the longitudinal mixed-methods study of CTC. For a detailed report, please refer to the main publication.

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<sup>12</sup> Vanderplasschen, W., Colpaert, K., Autrique, M., Rapp, R. C., Pearce, S., Broekaert, E., & Vandeveld, S. (2013). Therapeutic communities for addictions: a review of their effectiveness from a recovery-oriented perspective. *The Scientific World Journal*, 2013