Introduction

This Research to Practice Note provides a summary of the major findings from the Child Protection and Mothers in Substance Abuse Treatment study, conducted by Stephanie Taplin and Richard Mattick at the National Drug and Alcohol Research Centre, University of New South Wales. This three-year study was funded by Community Services under a collaborative research scheme with the University of NSW (2008-2010).

The detailed findings can be found in the full report which can be accessed at: http://ndarc.med.unsw.edu.au/sites/all/shared_files/ndarc/resources/TR.320.pdf.

Background and research questions

Parental substance use is one of the major factors considered when assessing risk for child abuse and neglect. A large body of research has found that parental substance misuse is associated with high rates of child maltreatment (for example, Smith & Testa, 2002; Fuller & Wells, 2003; Walsh, MacMillan & Jamieson, 2003; Scannapieco & Connell-Carrick 2007). Yet, research has also found that substance use by a parent does not necessarily mean that they are abusing or neglecting their children (Dawe et al., 2007; Grella, Hser & Huang, 2006).

Overseas research has found that families in which alcohol or other drug use is present are more likely to be involved with the child protection system than are families where substance use is not present, with reports, re-reports and placements in out-of-home care all more likely (Smith, 2003; Barth, Gibbons & Guo, 2006).

An important group to investigate in this area is parents in drug treatment services. Most of the available information comes from overseas and shows that around half of all drug treatment entrants have children and that women are significantly more likely to be directly responsible for the care of their children than are men (Stewart, Gossop & Trakada, 2007). Studies have also shown that half to two thirds of all mothers entering treatment have had contact with the child protection system and that up to one-third have lost their parental rights to at least one child (Grella, Hser & Huang, 2006; Grella, et al., 2009).

Very little research has studied the involvement of substance-using mothers with the child protection system, their parenting practices and the contributors to their becoming involved with the child protection system. The few studies that have conducted research in this area have all found that factors other than substance use were of greater importance in child protection involvement, and these factors were predominantly mental health problems and other disadvantages (Nair et al., 1997; Grella, Hser & Huang, 2006; Gilchrist & Taylor, 2009). The applicability of these overseas studies to the child protection system in Australia is, however, unknown.

This study is the first in Australia to examine the involvement of illicit drug-using mothers with the child protection system, and to ask them about their parenting issues. We compare mothers who are involved with the child protection system and those who are not, and discuss the implications of these differences. We also describe their interactions with both the drug treatment and child protection service sectors, their children, parenting practices, and the characteristics of the women themselves.
Methods

**Sampling and recruitment**

Women who had at least one birth child under 16 years of age were recruited between May 2009 and May 2010 from nine Opioid Treatment Program (OTP) clinics located throughout Sydney, New South Wales.

These clinics provide pharmacotherapy treatment for people who are dependent on opioids, such as heroin, and accounted for 39.2% of the NSW pharmacotherapy population in 2008 (AIHW, 2009). A large body of research evidence demonstrates that pharmacotherapy treatment is one of the most effective treatments for opioid-dependent users and is successful for most individuals in reducing the harms associated with opioid dependence (for example, Mattick et al., 2008; Mattick et al., 2009). The most commonly used and most rigorously researched of the pharmacotherapies is methadone, a syrup which is taken orally on a daily basis. Buprenorphine, the other main pharmacotherapy used for treating opioid dependence, is a tablet, taken sublingually less frequently than methadone. Pharmacological treatment was chosen for the purposes of recruitment as it is a treatment that is provided to a large number of women, it allows women to continue caring for their children while in treatment, and it requires regular attendance at a clinic.

Women constituted 29.1% of the OTP population at the participating clinics, and 49.0% of them had dependent children. At each clinic, all women who appeared to be eligible were approached to participate in the study. One hundred and seventy one (171) women were recruited in total, an estimated response rate of 59.0%.

**Ethics approvals and informed consent**

Ethics approval to undertake the study was obtained from both the University of New South Wales Human Research Ethics Committee (HREC) and the Sydney South West Area Health Service (SSWAHS) HREC.

Women were taken through a two-stage consent process, firstly to complete the interview and secondly for access to drug treatment and child protection records. Participants were reimbursed in cash for their time spent participating in the study.

**Measures**

Study participants completed a one-hour face-to-face interview covering the following broad areas:

- Mother’s demographic information, alcohol and other drug use history and current use, her own abuse and care history, physical and mental health problems.
- Information about birth children (demographics, maltreatment and care history)
- Parenting and/or child protection interventions/services received recently.
- Opioid pharmacological treatment program information.

Information collected included factors that have been found previously to be associated with child maltreatment. Where possible, valid and reliable scales were used along with questions that have been used in similar studies to allow for comparisons. The Brief Child Abuse Potential Inventory (BCAP) was completed by study participants consisting of 34 items which have good validity and reliability with the full Child Abuse Potential Inventory (CAPI), used to predict physical child abuse (Ondersma et al, 2005). The Kessler Psychological Distress Scale (K10) was used to measure psychological distress in the past four weeks. It has established reliability and validity across diverse settings including with injecting drug users (Hides et al., 2007).

**Data analyses**
A number of descriptive analyses were undertaken predominantly using the data collected via interviews with the 171 study participants. Chi-square analyses were conducted on categorical variables to determine differences between groups, and t-tests were used for continuous variables. Where data were skewed, medians were reported and Mann-Whitney tests performed. Spearman’s rank order correlation was used for correlating skewed data.

In order to compare women who had had recent child protection service involvement with those who had not, variables that had been found previously to be associated with child protection involvement or predictors of child abuse and neglect were analysed by group. Twenty-one variables that were either significant in the bivariate comparisons (p < 0.05) or had been identified in the literature were entered into a stepwise logistic regression model so the effects of each variable on child protection system involvement could be determined while controlling for the other variables (multivariate analysis). The results of these analyses are shown in final section of the results.

All analyses were conducted using SPSS for Windows.

**Results**

The results presented here are from self-reported data collected from the study participants. Self-reported data have been found to be sufficiently reliable and valid to provide descriptions of current substance use and drug related problems if the confidentiality and independence of the research are assured (Darke, 1998).

**Characteristics of the sample**

This section outlines some of the demographic characteristics of the 171 mothers on the NSW OTP who participated in the study, their children, their parenting and their involvement in child protection, and their opioid treatment program. Because of the selection criteria, all of these women were mothers of at least one child under 16 years of age.

Consistent with previous research with illicit-drug-using populations in treatment, these women were mostly in their mid to late thirties and highly disadvantaged, having little formal education (median 10 years of schooling), living on government benefits (87.1%), experiencing financial problems (80.6% reported at least one financial problem in the previous three months) and tending to live in public housing (58.3%).

Differing from previous research on this population, more women were single: 41.8% were not in a relationship at all and only 32.4% were married or in a de facto relationship. A greater number of Aboriginal women than expected were recruited into the study (22.2%) but this is likely to be because recruitment took place at a number of clinics in the Redfern/Waterloo area.

Interestingly, most of the women (70.4%) had no driver’s licence, either because they had never obtained one or they had lost their licence because of fines.

**Substance use:** The vast majority of the women had extensive substance use histories, again consistent with previous research with illicit-drug users in treatment. They had long histories of substance use, the age and order of commencement following patterns found in previous research (Ross et al., 2005; Shand et al., 2011). On average they started using heroin at 20.3 years of age, after tobacco, alcohol and cannabis, which commenced in their early teens. They had mostly been in drug or alcohol treatment several times before and first received any such treatment in their early twenties. One in five women (21.6%) reported using heroin in the month prior to the interview, but most used very occasionally.

**Mental health problems:** Also consistent with previous research, a significant number of women had mental health problems (Ross et al., 2005; Shand et al., 2011). Around half of the study participants had been diagnosed or treated for a psychiatric illness in the previous 12 months, mostly depression or anxiety, and over two-thirds were taking some form of psychiatric medication.
at the time of the interview. Scores from the K10 indicated levels of distress higher than in the general population but consistent with a substance-using population. Most women were in the ‘low’ or ‘moderate’ distress categories on the K10, but of particular concern were the 15 women in the ‘very high’ category. Scores on the BCAP were highly correlated with those on the K10. The association between mental health problems and child protection involvement will be discussed further in relation to the multivariate analyses.

**Domestic violence:** Thirty women had taken out an Apprehended Violence Order (AVO) which was current at the time of interview, mostly against a partner or ex-partner. Most of these women reported that the police had come to their house because of domestic violence or violence in the past 12 months. Nine reported leaving home because of violence in the home within the previous 12 months, one of whom was homeless and whose children were in care.

**Criminal involvement:** A large number of women reported a prison history, a similar proportion to previous studies of illicit-drug-using women in treatment (Shand et al., 2011). Twenty-seven women had been in trouble with the police in the previous six months.

**Women’s own abuse history:** Two-thirds of the women in the study reported that they had suffered some type of physical or sexual abuse as a child or teenager, and it was usually of more than one type. This means that if they suffered one type of abuse they tended to suffer other types as well. These abuses took place across a wide range of ages, but most commonly around 10 years of age. Sexual abuse was the most common type of abuse. Previous research has found similarly high rates of sexual abuse among opioid-dependent women (Conroy et al., 2009).

### Table 1: Major risk factors

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Sample (n = 171)</th>
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<tbody>
<tr>
<td>Age first heroin use</td>
<td>20.3 years (mean); range: 10-40 yrs</td>
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<tr>
<td>Mental health</td>
<td>54.2% reported recent psychiatric illness</td>
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<td></td>
<td>38.5% on prescribed psychiatric medication</td>
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<td></td>
<td>62.6% reported low or moderate distress on Kessler 10</td>
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<tr>
<td>Domestic violence</td>
<td>17.5% had a current Apprehended Violence Order</td>
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<tr>
<td>Crime</td>
<td>41.9% had a prison history</td>
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<tr>
<td></td>
<td>16.1% in recent trouble with police</td>
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<tr>
<td>Women’s abuse history</td>
<td>64.5% reported abuse as a child, mostly of more than one type:</td>
</tr>
<tr>
<td></td>
<td>41.2% physical abuse; 55.0% unwanted sexual experience</td>
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<td></td>
<td>43.8% forced sexual intercourse</td>
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<td></td>
<td>36.3% unwanted sexual experience with relative or authority</td>
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**Motherhood, children and social supports**

**Motherhood and children:** The 171 women who participated in the study had 400 children among them, 302 of whom were under 16 years of age. They generally had two children each, but the number ranged between one and eight. Some of the women were grandmothers, and six women were pregnant at the time of interview. The association between the number of children and child protection involvement will be discussed further in relation to the multivariate analyses.

Most of the women were very young when they had their first child. A substantial number were teenage mothers, a much higher proportion than among the general Australian population, of which, in 2007, 8% were teenagers when they had their first child (Hayes, Weston, Qu & Gray, 2010). Interestingly, there was a high proportion of women who started using heroin after they had had their first child.

One in five of their children were reported to have some type of behavioural or health problem, usually behavioural, and included problems such as autism. Fourteen women reported that they had had a child who had died.
Table 2: Age first gave birth and child characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Sample (n = 171)</th>
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<tbody>
<tr>
<td>Woman’s age of first birth</td>
<td>21 years (median)</td>
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<td></td>
<td>Range 14 – 43 years</td>
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<td></td>
<td>38.6% teenage mothers</td>
</tr>
<tr>
<td>Number of children</td>
<td>Total: 400 (302 &lt; 16 years)</td>
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<tr>
<td></td>
<td>Median: 2 children</td>
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<tr>
<td></td>
<td>Range: 1 – 8 children</td>
</tr>
<tr>
<td>Opioids or children first?</td>
<td>37.7% of women started opioid use after having their first child</td>
</tr>
<tr>
<td>Health or behavioural problems</td>
<td>64/302 children (21.2%)</td>
</tr>
</tbody>
</table>

*Parenting:* Half the women (52.1%) said that their substance use had affected their ability to parent their children, while slightly less than half (45.5%) said that it had not. Where substance use had reportedly not affected their parenting, women said that they had always prioritised their children’s needs and only used substances when the children were being cared for by other family members. Some women reported going to great lengths to ensure that their children did not find out about their substance use and/or treatment.

Around one-third of the women (31.7%) reported having undertaken a parenting course.

*Social supports:* Support provided by parents, usually mothers, and other family was of great importance to the women. Nearly two-thirds of the women (60.1%) had frequent contact with their parents, in most cases their mother, with 36.9% having daily contact. Parents and partners were equally the most important source of help with general needs (64.8% combined) but when help is needed in relation to their children women were more likely to seek it from their parents and other family members (60.1%). At the time of interview, 20.3% of women said they ‘often’ or ‘very often’ were unable to get help or support when they needed it, while for most it was less of a problem. Eighty women (46.8%) reported being the only adult in a household with children and 20 (11.7%) lived alone.

The association between supports provided by parents and child protection involvement will be discussed further in relation to the multivariate analyses.

*Community:* Responses to questions in relation to their feelings about their community indicate a tendency for these women to be less trusting of their neighbours and to feel less safe in their neighbourhoods than do females from the most disadvantaged areas in NSW as was found in the 2009 *NSW Population Health Survey.*
**Child protection system involvement**

A high rate of involvement with the child protection system was evident among the women in the study and their children.

*Child protection reports:* Most of the women (63.7%) reported that one or more of their children aged under 16 years had been the subject of child protection report. Over one-third (38.5%) had been reported by a health service – either the mother’s OTP, a hospital (generally the maternity ward where she had just given birth), or another health or medical service. Family were the next most common notifiers (27.5%). Fourteen women (12.8%) contacted child protection services themselves, generally seeking support of some kind. Not surprisingly, by far the most common reason (65.1%) for being reported was substance use (including alcohol), some of which was attributed to their partner’s substance use. Domestic violence was the next most common reason (23.9%).

*Children in out-of-home care:* One-third of the women (32.7%) had at least one child in out-of-home care (OOHC) at the time of interview. One-third of the children (n = 99; 32.8%) under 16 years of age were in care, a very similar proportion to that found in a Californian study by Grella, Hser and Huang (2006) (34.2%).

Of the children in care in this study, two-thirds were in kinship care either living with their grandparents or other extended family. Almost half of all the children in care (42.4%) had been removed from their mothers at birth or immediately after, this proportion being much higher among children under five years of age (72.7%). There were some differences by geographic area in the level of child protection system involvement which were not explained by differences in the characteristics of the women; that is, the women were similar but there was a significant difference in the rate at which they were involved with child protection services by area.

Once in OOHC, half of all contact between mothers and their birth children was in the form of regular supervised contact, especially if the children were in foster care.

*Children living away from their mother but not in OOHC:* As well as the 99 children in care, another 57 children were not living with their mother for other reasons, either because of Family Court orders or informal arrangements for the children to live with grandparents. Some women said they gave their children to grandparents to prevent them being removed involuntarily.

**Drug and alcohol treatment entry and services**

*Entry reasons:* Most women when asked why they sought pharmacological treatment said that they had themselves chosen to do so (63.6%); 35.0% cited either pregnancy or being able to care for their children as the main reason for choosing pharmacological treatment in preference to other treatments, although some were not yet mothers at the time. When asked why they chose their particular clinic, the vast majority cited proximity as the main reason (60.2%).

*Problems at entry:* Nearly all (95.3%) said they were experiencing a large number of problems at treatment entry, most commonly in their emotional wellbeing (58.5%), financial situation (55.5%) and family relationships (55.5%).

*Services:* In response to questions about services in the previous six months, the most commonly received were general medical (43.9%) and counselling (36.8%). Three services were more commonly received by those mothers involved with child protection than those who were not: counselling, legal assistance and childcare. Women receiving their pharmacological treatment through a public clinic were more likely to have a caseworker than those at private clinics.
Costs, take-aways and drug testing: There were no charges or direct costs for dosing at public clinics, but all those who were being dosed at private clinics paid between $35 and $76 per week (median: $56 per week). Just under half of the participants (45.5%) received no take-away doses, and they tended to be those treated at public clinics. If they did receive take-aways, the median number they received was four. Participants were asked how often they had to provide a urine specimen for drug testing at their OTP; almost half said they were tested randomly, with the rest mostly tested fortnightly or monthly. One-third of the women (n = 59; 36.4%) reported that they had also provided urine specimens for drug testing by child protection services in the past.

Changes while on the OTP

Reductions in substance use, criminal involvement, the number of problem areas and time spent with illicit drug-using friends were reported by the women since starting on the OTP, along with improvements in their parenting ability, financial situation and support networks. Heroin use reduced markedly from the time the study participants started on the program, both in the number reporting any heroin use in the past month (from 88.3% to 21.6%) and the number of times used (27.6 to 5.6 days per month).

Results of the multivariate analyses – identifying important outcomes

The following section outlines the results relating to the major research question: Are mothers in drug treatment services who are involved with child protection services different in terms of parenting and other characteristics to those mothers who are not involved?

Comparisons were undertaken between two groups of women – those currently involved with child protection services (n = 66) and those who were not (n = 105). Participants were categorised as having recent child protection system involvement if they either: (1) reported having at least one child living elsewhere because of a child protection court order; (2) had lost parental rights to at least one child; or (3) whether the respondent had received child welfare services within the previous six months. These categories are the same as those used by Grella, Hser and Huang (2006) in their large California study. These comparisons, the bivariate analyses, produced some interesting results which revealed several areas of difference between the two groups of mothers.

Outlined here are the characteristics which, on their own, increased the likelihood of a woman being involved with child protection (p < 0.01). Firstly, not completing Year 12; not having a driver’s licence; having more children; criminality (that is, being in trouble with the police in the previous six months and having a prison history); a lack of social supports (that is, not having daily contact with their parents and not being able to get help when needed); and a more extensive substance use history (as indicated by having been in a greater number of substance use treatments, having their first substance use treatment at a younger age, and a younger age of first heroin use).

Identified and significant variables were then entered into a logistic regression model. Those variables found to significantly increase the likelihood of being involved with child protection services (while controlling for other variables) were:

- **The number of children** the woman had increased the odds of child protection involvement: for each additional child the odds increased by 1.4, compared with women who had no more children.
- **Mental health problems**, as indicated by being on a prescribed psychiatric-type medication, increased the odds of being involved with child protection by three times, compared with a woman who was not on this type of medication.
- **Contact with parents** was also significant in the model. Seeing her parents every day, usually her mother, reduced the odds of a woman being involved with child protection by 78% in comparison to women who had no contact or saw their parents less often.
Table 3: Significant variables in the regression model

<table>
<thead>
<tr>
<th>Variable</th>
<th>Odds ratio</th>
<th>95% CI</th>
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<tbody>
<tr>
<td>On psychiatric medication</td>
<td>2.962*</td>
<td>1.226, 7.157</td>
</tr>
<tr>
<td>Number of children</td>
<td>1.431*</td>
<td>1.004, 2.039</td>
</tr>
<tr>
<td>Seeing parents</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>No contact/rarely (ref)</td>
<td>**</td>
<td></td>
</tr>
<tr>
<td>Monthly/weekly</td>
<td>1.234</td>
<td>0.465, 3.275</td>
</tr>
<tr>
<td>Daily</td>
<td>0.220**</td>
<td>0.071, 0.676</td>
</tr>
</tbody>
</table>

* p < 0.05; ** p < 0.01

Other variables that were significant in the bivariate analyses, including the severity of substance use, were no longer significant when other variables were accounted for in the multivariate analyses.

Discussion

This is the first relatively large-scale Australian study to interview mothers with a history of substance use about their children, parenting issues, and involvement with the child protection system. It builds on existing knowledge from studies conducted outside Australia and, by comparing with this overseas research, allows us to better determine their applicability to the Australian situation.

The results from this study show that, rather than severity of substance use being associated with mothers’ involvement with the child protection system, other factors are of greater importance, a finding which supports the small amount of overseas research undertaken on this question (Nair et al., 1997; Grella, Hser and Huang, 2006; Gilchrist & Taylor, 2009). A focus on substance use may, in practice, obscure these other factors, which can be ameliorated.

In this study, mental health problems were indicated by being on a psychiatric-type medication, usually for depression or an anxiety disorder, rather than a recent psychiatric diagnosis or a measure of current distress (Kessler 10), and were significantly associated with child protection involvement. Mental health problems, usually depression, have been previously associated with child protection involvement (Nair et al., 1997; Gilchrist & Taylor, 2009) and high rates of high rates of depression and anxiety have been found in other Australian studies with women in treatment for substance-use problems (Ross et al., 2005; Shand et al., 2011).

In this study, for each additional child the mother has, the odds of child protection involvement increased by 1.4 times. The number of children in the home has been found in overseas studies to be a predictor of child protection involvement (Nair et al., 1997; Grella, Hser & Huang, 2006), and this may be because the number of children can affect the emotional, social and physical resources available for individual children.

The role of social supports available to parents and child protection involvement has been discussed previously (for example, Dawe et al., 2007) but its association with child protection involvement in multivariate models has not previously been found with substance-using mothers. The study by Nair and colleagues (1997) found that social support was a significant predictor in their bivariate analyses, women who had a greater number of and more adequate supports being less likely to have their children placed in substitute care, but not in the multivariate analyses.

A recent study by Berlin, Appleyard and Dodge (2011) found that the mothers’ own physical abuse history directly predicted child maltreatment but that this association was mediated by mothers’ social isolation and aggressive responses. Women who were abused during childhood are at risk of developing inadequate supportive friendships, romantic partners and social networks, all of which can hinder their abilities to support and protect their own children (Berlin, Appleyard and
Dodge, 2011). Suchman and colleagues (2006) found that mothers who perceived their own mothers as uncaring and intrusive were more likely to have lost custody of a minor child. This finding may partly explain why women who saw their parents daily in this study were less likely to be involved with child protection services – they had a better relationship with their own parents and therefore were better parents themselves as well as having someone to help with the children.

Similar to previous research with women in substance-use treatment events (for example Dawe et al., 2007), this sample of mothers on the OTP was largely a disadvantaged one with multiple problems. There were also high rates of child protection involvement in this sample, with one-third having at least one child in OOHC at the time of interview.

While in pharmacological treatment, the vast majority of women in the study made improvements in areas which impact on their ability to care for their children – in particular, their substance use, criminal involvement and sources of support improved. Women involved with child protection, however, stayed no longer on the OTP than women who were not, a concern given these improvements and the research evidence on the benefits of retention in opioid pharmacological treatment.

The findings from this study have implications for child protection and drug treatment policy and practice. These mothers have significant problems which are of greater importance in terms of child protection involvement than the severity of their substance use, when all factors are considered. This research supports a focus on interventions which treat substance-using women’s mental health problems and improves their social supports. The provision of targeted women-only services is also supported for substance-using women to help them deal with their mental health problems and to enhance parenting, coping skills and social supports. It is important that such services are provided if we are to reduce the high rates of intergenerational abuse, trauma and disadvantage among these women and their children.

**Acknowledgements**

The researchers would like to acknowledge and thank the NSW Department of Family and Community Services, Community Services for their support of this research, as well as the University of New South Wales and the National Drug and Alcohol Research Centre for additional funding and assistance. Assistance was also provided to the project by Melissa De Vel Palumbo, who contributed a significant amount of time during her research placement at NDARC, and Barbara Toson, Biostatistician, who provided statistical advice. Our thanks are also extended to the participants in the study, the women who allowed themselves to be interviewed, and the staff from the NSW Opioid Treatment Clinics who were so welcoming and helpful.

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References


