



Factors associated with drug and alcohol dependency among women in prison

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Drug and alcohol use have been found to be important correlates of criminal offending. The Drug Use Careers of Offenders (DUCO) studies found high levels of drug and alcohol dependency among women, men and juveniles incarcerated in Australian prisons. Offenders also reported a range of negative life experiences related to their drug and alcohol abuse. The DUCO female study offers an opportunity to explore the interconnections between drug and alcohol problems experienced by family members, other life experiences of the women offenders, and drug and alcohol dependency at the time of arrest. Results show correlations between family drug and alcohol problems and the perpetration of child abuse. A range of other negative life experiences were associated with growing up in families with drug and alcohol problems, including early onset of criminal offending, drug and alcohol dependency, and low socioeconomic status at the time of arrest. These results suggest that early intervention with families of drug users is needed in order to break the intergenerational cycle of problem drug and alcohol use including alcohol dependency which is a more prevalent problem among Indigenous women prisoners. Prison programming and aftercare for women offenders with drug or alcohol dependencies should be designed to consider the needs of their children.

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Director

The family is one of the most important influences on the development of drug use problems. Families where illegal drugs are used are frequently characterised by neglect and poor supervision of children, inconsistent discipline, poor child-parent attachment, family conflict and abuse, poor parental mental health, parental drug use and criminality, and social isolation (Mitchell et al. 2001; Spooner, Hall & Lynskey 2001). These harms raise the risk of criminal behaviour and drug use among the children of drug users.

Drug use is a key factor in criminal offending; therefore, the prevention of drug use has important implications for the prevention of crime (Makkai & Payne 2003; Prichard & Payne 2005; Willis & Rushforth 2003; Ekstrand 1999; Denton 2001). The Drug Use Careers of Offenders (DUCO) female study, conducted by the Australian Institute of Criminology in 2003, is the largest study of women prisoners in Australia to examine the interconnections between women's drug use histories, criminal histories and early life experiences (see Johnson 2004 for details). This study found that among these incarcerated women:

- 62 percent were regular drug users at the time of their arrest and 39 percent were regular users of multiple drug types
- 55 percent were dependent on drugs and 27 percent were dependent on alcohol
- 26 percent grew up in families with drug problems and 44 percent were raised in families with alcohol problems
- drug dependency was higher among women who experienced mental health problems and childhood abuse, and who were exposed to family members with drug problems in the family of origin.

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The interconnections between family drug and alcohol problems, other negative life experiences and drug and alcohol dependency among women offenders require further exploration. This report examines these inter-relationships for 470 women incarcerated in six jurisdictions in Australia in the DUCO female study.

Links between family-related drug and alcohol problems and child abuse

Very general questions were included in the DUCO study regarding family-related drug and alcohol problems. Respondents were asked ‘When you were growing up, did anyone in your family have a problem with drugs or alcohol?’ One half of the imprisoned women in this study (52%) reported growing up in families where at least one family member had a drug or alcohol problem. Fathers/stepfathers and mothers/stepmothers were most commonly reported as alcohol abusers (28% and 14% of incarcerated women, respectively). Siblings/steppiblings were the group most likely to have drug problems (17%). Occurring with equal frequency were parents with drug problems, and siblings and other family members with alcohol problems (6%).

Four percent of women grew up in families where other family members had drug problems (Figure 1).

Drug and alcohol problems can cause family disruption and interfere with effective parenting (Advisory Council on the Misuse of Drugs 2003). In the absence of other stabilising influences in the family, supervision and protection of children may be compromised and this may result in a range of negative consequences for children in the household. The priority in the DUCO study of female offenders was to examine the connections between drug use and crime; therefore women who reported drug problems, or combined drug and alcohol problems in the family of origin, were analysed together (26% of the sample), keeping separate those with family-related alcohol problems only (27%). This helped ensure that the groups were distinct and that women were not counted in both categories. Similarly, women with a drug dependency were grouped with those who were dependent on both drugs and alcohol, keeping separate women who were dependent on alcohol only.

Women who were exposed to family members with drug or alcohol problems were significantly more likely to report

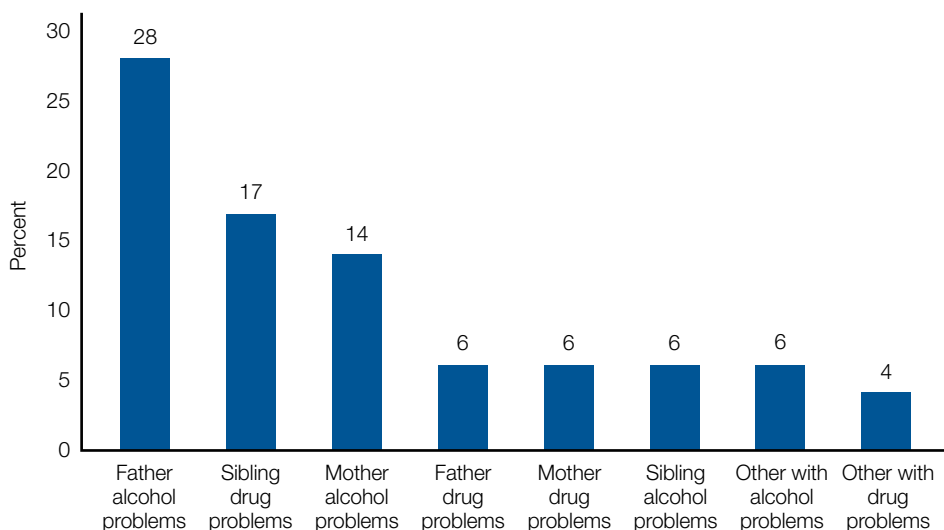
having been abused in childhood: 82 percent of women raised in families with drug problems and 76 percent of women raised in families with alcohol problems reported experiencing at least one type of child abuse compared with 46 percent of women with no family drug or alcohol problems. Figure 2 illustrates the percentages of women reporting emotional, physical and sexual abuse and neglect according to whether family members had drug or alcohol problems. For all types of abuse, child abuse was more prevalent for women exposed to drug or alcohol problems in their families of origin.

These results show that the disruption to families that can result from problematic drug or alcohol use raises the risk of all types of abuse against girls in the family. Looking more specifically at the association between the family member with the drug or alcohol problem and the person identified as the perpetrator of child abuse, the data show a link between the two (Table 1). For example:

- parental emotional abuse was more prevalent among women whose mothers/stepmothers or fathers/stepfathers had drug (87% and 77%) or alcohol problems (57% and 61%) compared with no parental drug or alcohol problems
- physical abuse by parents was more prevalent among women whose parents had drug or alcohol problems and was highest in families with drug use by fathers
- higher levels of parental neglect were reported by women whose fathers/stepfathers had drug problems (42%)
- emotional and physical abuse by siblings was higher for women whose siblings had drug or alcohol problems.

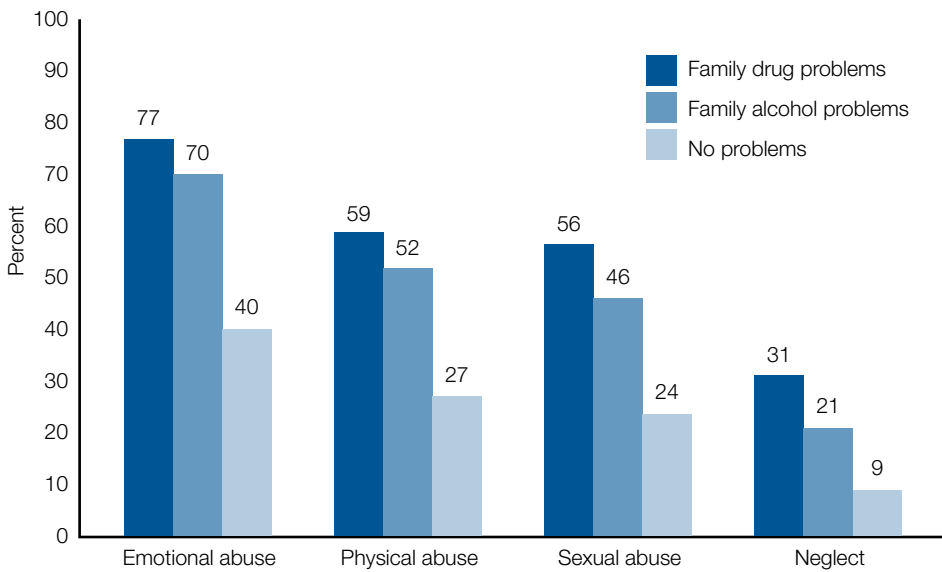
In addition, emotional or physical abuse by siblings was more prevalent among women whose parents had drug use problems. This suggests that the ability of parents to monitor the behaviour of their children and protect them from abuse toward each other is diminished if they use drugs. This study also found that

Figure 1: Women reporting drug and alcohol problems among family members, percent



Source: AIC, DUCO female survey, 2003 [computer file]

Figure 2: Women reporting child abuse by exposure to drug or alcohol problems among family member, percent



All relationships are statistically significant, $p < .05$
 Family drug problems may also include alcohol problems. Family alcohol problems include alcohol problems only
 Source: AIC, DUCO female survey, 2003 [computer file]

growing up with fathers or siblings who had drug or alcohol problems raised the chance of sexual assault by a stranger. This may be due to an increase in substance-abusing strangers in the house who are involved in drug buying or selling, or a reduction in effective supervision of children outside the home which raises their risk of sexual victimisation. These findings suggest that parenting deficits can result from drug and alcohol abuse in the family and that children in these families can suffer elevated levels of emotional, physical or sexual abuse or neglect as a result.

Other factors associated with family drug and alcohol problems

In addition to increased risk of child abuse by family members and strangers, women in this study who were exposed to drug or alcohol problems among family members reported other negative life experiences. While women in prison are a disadvantaged group relative to the general population, imprisoned women who grew up in families with drug or alcohol problems were more likely to have negative life experiences compared with women not exposed to drug or alcohol problems (Table 2). For example, women who grew up in families with drug problems:

- had higher levels of drug dependency
- higher levels of mental health problems
- were more likely to have received a diagnosis for mental health problems
- were more likely to be prescription drug users (this includes amphetamines, benzodiazepines and morphine)
- had lower levels of education
- were younger at the time of the current incarceration
- were younger at the time of first drug use
- were younger at the time of first criminal offence
- were more likely to be non-Indigenous
- were more likely to earn at least half of their income from crime or sex work
- had higher rates of prior adult incarceration.

Table 1: Women reporting child abuse according to who had the family drug or alcohol problems, percent

Emotional abuse by parents	Mother	Father
Parental drug problems	87	77
Parental alcohol problems	57	61
No adult problems	34	29
Physical abuse by parents	Mother	Father
Parental drug problems	50	69
Parental alcohol problems	43	43
No adult problems	26	22
Neglect by parents	Mother	Father
Parental drug problems	33	42
Parental alcohol problems	33	20
No adult problems	10	11
Emotional abuse by siblings		
Sibling drug problems		32
Sibling alcohol problems		18
No sibling problems		8
Physical abuse by siblings		
Sibling drug problems		25
Sibling alcohol problems		14
No sibling problems		6
Sexual abuse by strangers		
Father drug problems		26
Father alcohol problems		12
No problems		9

Statistically significant differences, $p < .05$
 Drug problems may also include alcohol problems. Alcohol problems include alcohol problems only
 Source: AIC, DUCO female survey, 2003 [computer file]

Women raised in families with drug problems were also more likely to have used drugs other than cannabis (91% compared with 68% of women with no family-related drug problems) and to be regular users of multiple types of drugs (62% compared with 29%), more likely to receive treatment for their drug use (72% compared with 41%) and more likely to be high on drugs at the time of their last offence (65% compared with 36%).

Compared with women reporting no drug or alcohol use problems in their families, women raised in families with alcohol problems were more likely to report:

- alcohol dependency
- drug dependency
- mental health problems
- low educational attainment
- Indigenous status
- prior adult incarceration
- living in public housing, a shelter or on the street in the six months prior to arrest
- earning at least half of their income from welfare.

Measuring child abuse

The DUCO female study measured women’s childhood experiences of emotional abuse, physical abuse, sexual abuse and neglect through the following questions (adapted from Kerber, Maxwell & Wallich 2001):

Thinking back to when you were growing up, did any of the following things ever happen to you?

- were you ever made to feel very sad, bad or frightened (emotional abuse)?
- were you ever pushed around, hit, kicked or beaten (physical abuse)?
- were you ever touched or kissed in a way that made you feel uncomfortable or made to do something sexually that you didn’t want to do (sexual abuse)?
- were you ever left alone as a child, didn’t have enough to eat, or had inadequate clothing (neglect)?

Factors associated with drug dependency

Logistic regression was conducted to identify the factors that predict drug dependency among incarcerated women while controlling for early exposure to drug problems in the family of origin. This information can assist correctional administrators to identify women at risk of drug dependency upon admission to prison or when beginning a community sanction and to develop appropriate

treatment strategies for them. As shown in Table 3, earning income from crime or sex work is the most important factor associated with drug dependency followed by prescription drug use, being young, early exposure to family members with drug problems, and living in public housing, a shelter or on the street in the six months prior to arrest. Women presenting to a correctional sentence with these life histories and experiences are at risk of having a drug dependency that requires treatment.

Table 2: Characteristics of women who grew up in families with drug or alcohol problems, percent

	Family drug problems	Family alcohol problems	No problems
Drug dependency*	81	52	42
Alcohol dependency*	11	22	9
Mental health problems growing up*	74	70	47
Anxious/stressed*	54	36	20
Think bad thoughts*	42	27	21
Didn’t care what happened to her*	36	22	13
Fearful/distrustful of people*	49	29	33
Nightmares*	32	27	16
Arguments/fights*	52	36	22
Very sad*	50	38	26
Mental health diagnosis*	45	41	25
Prescription drug use*	58	40	40
Education*			
Year 10 or less	52	56	38
Apprenticeship or TAFE	42	31	39
Year 12	4	8	6
University degree	–	6	15
Mean age at current incarceration ^(a)	29	33	35
Mean age left school	15	15	16
Indigenous	22	40	38
Non-Indigenous	27	22	51
Economic disadvantage			
Public housing, shelter, street*	45	53	34
At least half income from welfare*	48	65	40
At least half income from crime/sex work*	42	27	29
Juvenile detention	23	14	15
Previous adult prison*	50	50	35
Mean age at first drug use ^(b)	14	16	17
Mean age at first offence ^(c)	14	18	21

– Fewer than five cases

* Statistically significant, chi square p < 0.05

(a) Difference is statistically significant for family drug problems and no substance use problems

(b) Differences are statistically significant for family drug problems and no substance use problems, and for family drug problems and family alcohol problems

(c) Differences are statistically significant for family drug problems and no problems, family drug problems and family alcohol problems, and for family alcohol problems and no problems

Drug problems may also include alcohol problems. Alcohol problems refer to alcohol problems alone

Drug dependency may also include dependency on alcohol. Alcohol dependency refers to dependency on alcohol alone

Source: AIC, DUCO female survey, 2003 [computer file]

Factors associated with alcohol dependency

Five significant factors are associated with alcohol dependency at the time of arrest (Table 4). Indigenous status is the most important, raising the odds of alcohol dependency almost fourfold while controlling for the effects of other factors. Early exposure to family members with alcohol problems triples the odds of alcohol dependency. Other significant factors include education and low economic status.

Having had prior incarceration as an adult reduced the odds of alcohol dependency. Factors that were common to both drug

and alcohol dependency are exposure to substance abuse in the family of origin and living in impoverished circumstances in the six months prior to arrest.

Policy implications

Immediate family members of problem drug and alcohol users are exposed to a range of harms, including child abuse and increased likelihood of drug and alcohol dependency. The negative impacts of drug and alcohol problems for other family members include modelling behaviour and attitudes supportive of substance abuse and providing easy access to drugs and alcohol. This study

suggests that families with drug and alcohol problems have a reduced capacity to protect female children from emotional, physical and sexual abuse and neglect. Women in this sample who were raised in families with drug or alcohol problems also had poorer educational and economic outcomes, higher prevalence of mental health problems, and earlier onset of criminal offending. Higher percentages had been imprisoned previously as an adult. Indigenous women were more likely to be raised in families with alcohol problems and more likely to be associated with having an alcohol dependency at the time of arrest.

This study confirms the importance of early intervention with drug users and their families to help avert harms related to drug use. Almost half the women in this prison study were living with children at the time of their arrest and half of these mothers were regular drug users. The needs of children therefore must be considered in the correctional programming of women on sentence in the community or in prison. Treatment also needs to consider aftercare arrangements that provide support for problem drug users who are returning to their children (Advisory Council on the Misuse of Drugs 2003). Similarly, those in the helping professions intervening with child victims of abuse and neglect need to consider the possibility of drug and alcohol abuse by the perpetrators or others in the home.

Results of this study also support research which suggests that interventions need to address multiple risk factors and problem behaviours and that collaboration with multiple interventions is warranted (Spooner, Hall & Lynskey 2001; Mitchell et al. 2001). Interventions involving the parents and children of drug users are needed to break the intergenerational cycle of drug use by strengthening positive relationships among family

Table 3: Risk factors for drug dependency, logistic regression

	Adjusted odds ratios	SE	95% CI
Family drug problems	3.31*	0.31	1.80 – 6.10
Child abuse	1.28	0.30	0.70 – 2.30
Mental health problems	1.04	0.30	0.58 – 1.87
Prescription drugs	3.72*	0.27	2.21 – 6.25
Public housing, shelter, street	2.01*	0.28	1.16 – 3.50
Income from crime/sex work	8.01*	0.31	4.40 – 14.70
Prior adult incarceration	1.58	0.26	0.95 – 2.60
Education (year 10, TAFE or apprenticeship)	1.87	0.34	0.96 – 3.60
Age (35 or under)	3.75*	0.26	2.25 – 6.25
Indigenous	0.73	0.31	0.40 – 1.34
-2 log likelihood 421.3			
Model chi square 200.2* (10 df)			

* p < .05
Includes drug dependency alone or drug and alcohol dependency
Source: AIC, DUCO female survey, 2003 [computer file]

Table 4: Risk factors for alcohol dependency, logistic regression

	Adjusted odds ratios	SE	95% CI
Family alcohol problems	2.95*	0.26	1.17 – 3.24
Child abuse	1.18	0.31	0.65 – 2.15
Mental health problems	1.73	0.29	0.97 – 3.09
Public housing, shelter, street	2.12*	0.26	1.27 – 3.53
Income from welfare	1.60	0.26	0.97 – 2.67
Prior adult incarceration	0.47*	0.26	0.28 – 0.79
Education (year 10, TAFE or apprenticeship)	3.10*	0.45	1.29 – 7.45
Age (35 or under)	0.85	0.26	0.51 – 1.41
Indigenous	3.87*	0.27	2.26 – 6.62
-2 log likelihood 425.5			
Model chi square 101.0* (9 df)			

* p < .05
Includes alcohol dependency only and no drug dependency
Source: AIC, DUCO female survey, 2003 [computer file]

Measuring drug and alcohol dependency

Clinical assessments of drug or alcohol dependency were not made of the women in this study. Instead, dependency was defined as women who answered 'yes' to any three of the following six areas in the six months prior to being arrested. This set of questions was asked separately for drug and alcohol use.

In the six months prior to being arrested have you...

- spent more time drinking/using drugs than you intended
- neglected some of your usual responsibilities because of drinking or using drugs
- wanted to cut down your drinking or drug use
- someone objected to your use of alcohol or drugs
- often found yourself thinking about drinking or using drugs, or
- used alcohol or drugs to relieve feelings such as sadness, anger or boredom.

This six-item scale is a subset refined from a range of screening items for use in determining the prevalence of alcohol and drug involvement (Hoffman et al. 2003).

In this analysis, the categorisation of drug dependency includes some women who are dependent on alcohol as well as drugs while alcohol dependency refers to dependence on alcohol only.

members and helping to protect youth against risks for drug abuse. There is evidence that interventions with young people designed to change their attitudes, beliefs and behaviours regarding drug use will not be as effective undertaken in isolation from their families as family-focused interventions would be (Toumbourou, Duff & Bamberg 2003).

It is important to keep in mind that surveys of offenders, especially those that touch upon sensitive topics such as drug use and child abuse, have certain limitations. For example, some respondents may have been reluctant to disclose child abuse to interviewers due to shame, embarrassment or a wish to

avoid discussing emotionally troubling experiences. Problems with memory recall may also bias some responses regarding child abuse or drug and alcohol use problems among family members. Some respondents may not have been aware of drug or alcohol problems among immediate family members.

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