Assessing childhood abuse and neglect in residential drug treatment clients[1]

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ABSTRACT

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This article focuses on self-reported child neglect and abuse in residential drug treatment drawing on data from clients in Scotland collected 1996-1999. It notes the lack of adoption of regular screening using validated tools of childhood trauma in men and women. The authors' findings suggest that the prevalence of childhood abuse histories are higher in female drug users than male drug users but recognises that even with standardised tools there is a wealth of diverse categories of severity of abuse that warn against broad treatment plans for 'the traumatised'.

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INTRODUCTION

A growing number of international studies have demonstrated that a history of child abuse is common in the psychosocial profiles of substance misusers seeking treatment [1] [2] [3]. Childhood histories have been collected in the empirical research in four ways: direct face-to-face interviews, postal and telephone surveys, self report instruments and chart reviews. Self-report tools within an interview have become the preferred tool of research.

Self-report tools are subject to the underlying assumptions and values of their authors which may be transparent in the operational definitions used. In the literature, issues of definitions are largely unresolved and terms such as 'trauma' 'maltreatment' and 'abuse' are often used interchangeably and this has implications for research and clinical practice. For instance, sexual abuse has been assessed in contrasting ways. Some authors have relied on age differentials between victims and abusers in their definitions or different age limits for victims [4] [5] [6]. For example, one of the indicators of sexual abuse in Bernstein et al's Childhood Trauma Questionnaire [6] is the response to the statement 'When I was growing up.. I had sex with an adult or with someone who was a lot older than me (someone at least 5 years older than me)'.

The number and types of questions about sexual and physical abuse in studies has varied from one screening question i.e. 'have you ever been sexually abused' [7] [8] to a set of screening questions i.e. 'In the past 30 days, to what degree were you bothered by past experience involving a) emotional abuse; b) physical abuse and c) sexual abuse; from the EuropASI [9] to multiple questions about experiences that fit a definition of abuse within mention of the

word ‘abuse’ [10] or the explicit mention of feeling abused as in the in-depth 53 item or 90 item versions of the Childhood Trauma Questionnaire [6].

The analytical strengths and weaknesses of available investigative tools demonstrate the history of different definitions and approaches to studying childhood experiences retrospectively. Some tools gather descriptive information and then apply formal ‘abuse’ criteria to the qualitative data while others, such as the Childhood Trauma Questionnaire, collect quantitative data via Likert-scale responses to statements. This approach typically leads to analysis of severity of ''abuse’ or dichotomous ‘cut off’ points for the ‘abused’ or ‘non abused’ in a search for associations to explain behaviour in adult life such as substance use.

Since the design and dissemination of the Childhood Trauma Questionnaire in the mid 1990s, a growing number of studies have used the tool to assess childhood histories of abuse. These empirical investigations, mainly conducted by psychiatrists and the medical profession, include the study of male and female soldiers in the US army [11] [12], inpatient women undergoing trauma-related treatment [13] [14], women aged 55-73 years old in a clinical trial for panic disorder [15], adolescents[16] [17], alcoholics [18] and substance using women [19] [20].

This paper presents data from the Scottish site of a large scale European study: the Improving Psychiatric Treatment in Residential Programmes (IPTRP) Project. The IPTRP project was funded with the objective of establishing a Concerted Action (CA) addressing the 'needs of emerging dependency groups' referenced in Area 6 (public health research including health service research) of the BIOMED II programme of the European Commission. One of the clinical purposes of this cross-sectional retrospective study was to estimate the prevalence of childhood trauma histories in men and women in drug treatment in Scotland using the Childhood Trauma Questionnaire [6]. The use of such a validated self-report instrument within

a face-to-face interview offered the research team one of the better methods for the assessment of childhood trauma for clinical interpretations and potentially cross-national comparisons. It was hoped that rapport and empathy during the interviewing process would increase the chance of disclosure.

In this article, we critically examine self reported data collected using the Childhood Trauma Questionnaire (CTQ) in a group of adults undergoing residential drug treatment in Scotland. We explore the process of assessing childhood experiences using this tool: collecting descriptive data on the 53-item CTQ, creating dimensional scores by summing Likert-scaled items and then using pre-determined cut off points for clinical interpretation of abuse severity. We discuss the findings of the analysis and their implications for research and clinical practice.

THE STUDY

This paper reports on a focussed national effort of the IPTRP Project detailed above.

Negotiation for access to the drug users in the recovery process at 3 Scottish treatment units by the principal investigator (JW) began in December 1996 and continued until April 1997 with regular meetings with the 'gatekeepers'. In this negotiation period, great pains were taken to be transparent about the research tools used, and how the research would be used. As Goode reflects on her research with substance-using mothers "particularly in view of the acute vulnerability of this client-group, gate-keepers had a clear responsibility to protect them from exploitation by unscrupulous researchers, or from direct or indirect harm" ([21] point 7.1) Likewise, JW invested many hours in explaining clearly and fully the nature of the research process. From May 1997 to June 1998 JW provided 26 days of staff training and support in implementation of new assessment procedures at the residential units.

The systematic sample were male and female clients consecutively admitted to the 3 Scottish residential treatment units during the period from June 1997 until October 1998. Clients were approached by treatment unit staff and if interested gave informed consent to participate in the study. Inclusion criteria for participants at the onset of the study were: being aged between 16 and 60 years old and being in a fully detoxified state.

Interviews and recruitment of 17 additional interviewers drawn from amongst the respective treatment staffing establishments, who had received validated training was conducted by one of the authors (JW). Each research participant completed a battery of standardized validated clinical research instruments (Childhood Trauma Questionnaire, The Structured Clinical Interview for DSM-IV Axis I and Axis II Disorders, European Addiction Severity Index, the Maastricht Social Network Analysis). The standardised assessment battery, was administered in the third to fourth week of treatment when clients participating in the study had achieved a fully detoxified status. In order to overcome any literacy problems, clients were given the choice to complete the questionnaire on their own or have the interviewer conduct the assessment. The data was managed and analysed using SPSS for Windows (SPSS Inc. Chicago).

This article uses data from a subset of 60 men and 31 women drug users who provided completed usable data relating to the Childhood Trauma Questionnaire.

The Childhood Trauma Questionnaire is a self-report screening questionnaire that has been designed to be an assessment of emotional abuse, physical abuse, sexual abuse, emotional neglect and physical neglect. Many items are phrased in objective behavioural terms (when I was growing up, someone tried to touch me in a sexual way or tried to make me touch them) while others call for more subjective evaluations (when I was growing up, I believe that I was

sexually abused). Validation studies of the CTQ have been conducted in 7 different clinical and non referral samples consisting of over 2200 respondents. These studies have supported the reliability and validity of trauma histories obtained using the CTQ including their stability over time, convergent and discriminant validity with structured trauma interviews and corroboration using independent data [22]. The Childhood Trauma Questionnaire (in its 90 item or 53 item or shorter formats) can not be used for research or clinical purposes without the permission of the authors.

Our study used the 53-item version of the CTQ. The CTQ was preceded with the instructions: "*These questions ask about some of your experiences growing up as a child and teenager. For each question, circle the number that best describes how you feel. Although some of these questions are of a personal nature, please try to answer an honestly as you can. Your answers will be kept confidential*"

Clients respond to statements on a 5 point scale ranging from 1-never true to 5-very often true. Scoring from David P Bernstein (Copyright 1995) had the following ranges: emotional abuse: 12-60, physical abuse 7-35, sexual abuse 7-35, emotional neglect 16-80 and physical neglect 8-40. Guidelines have been offered by David P Bernstein for the clinical interpretation of CTQ scores using 'cut-off' points for abuse severity. These are outlined below.

	None or minimal	*Low to moderate*	*Moderate to Severe*	*Severe to Extreme*
Emotional Abuse	12-29	30-34	35-40	41 and above
Physical Abuse	7-11	12-13	14-17	18 and above
Sexual abuse	7-8	9-12	13-21	22 and above
Emotional neglect	16-38	39-49	50-60	61 and above
Physical neglect	8-11	12-13	14-18	19 and above

Table 1 summarises the background characteristics of the study group. The study group were all aged between 16 and 44 years old and reported mainly living in a large city. Nearly three quarters of the group had been mainly unemployed over the previous three years. Three quarters of the study group reported that polydrug use was the major problem for which they were engaging in drug treatment.

[Place Table 1 here]

Substance use

All clients participating in the research study had a long history of alcohol and drug use (**Table 2**). The median age of first use of alcohol and drugs was 14 years. Over 90% of the study group reported that they had ever used heroin and 19% of the group on entering treatment reported their current heroin use was a concern. The median age for using more than one substance daily was 15 years old for men and women. Three quarters of the group reported on entering treatment that their current polydrug use was a concern.

[Place Table 2 here]

Emerging childhood experiences

The descriptive CTQ data by gender is presented within each 'domain' in turn: emotional abuse in **Table 3**, physical abuse in **Table 4**, Sexual abuse in **Table 5**, emotional neglect in **Table 6**, physical neglect in **Table 7**.

[Place Tables 3-7 here]

Table 3 shows that compared to men, a significantly higher proportion of women responded 'often true' and 'very often true' to six of the 12 indicators of 'emotional abuse' : *When I was growing up… people in my family criticised me* (p=0.006), *When I was growing up…I had to protect myself from someone in my family by fighting, hiding or running away* (p=0.019), *When I was growing up …people in my family said hurtful or insulting things to me* (p=0.036), *When I was growing up…people in my family seemed out of control* (p=0.025), *When I was growing up… someone in my family hated me* (p=0.001) and *When I was growing up… I was frightened of being hurt by someone in my family* (p<0.001). In their subjective responses to *'when I was growing up.. I believe that I was emotionally abused'* 10 /30 (33.3%) women and 36/60 (60%) men responded never or rarely true.

A striking finding of the cross tabulations is clearly displayed in **Table 5.** Compared to men, a significantly higher proportion of women responded 'very often true' and 'often true' to 7 out of 8 indicators of what can be clinically assessed as 'sexual abuse': *When I was growing up… I had sex with an adult or someone who was a lot older than me (someone at least 5 years older than me* (p=0.006), *When I was growing up… Someone tried to tough me in a sexual way or tried to make me tough them* (p<0.001), *When I was growing up.. Someone threatened to hurt me or tell lies about me unless I did something sexual with them* (p<0.001), *When I was growing up..Someone tried to make me do sexual things or watch sexual things* (p<0.001), *when I was growing up.. Someone molested me* (p<0.001) and *When I was growing up.. I believe that I was sexually abused* (p<0.001). In this last statement, a subjective evaluation, 15/30 women (50%) and 57/60 men (95%) responded never or rarely true.

The next stage in the process of interpreting the CTQ data was the summation of the raw scores for each 'domain' as outlined earlier in the text. Comparisons of the mean scores and their standard deviations for each domain by gender are presented in **Table 8**. The translation of

Likert-scale responses to descriptive statements to numerical scores presents highly significant differences by gender for 'emotional abuse' (p=0.002) and 'sexual abuse' (p=0.001) and marginal significant difference by gender for 'physical abuse' (p=0.045) which is surprising as there were no significant differences for any one of the 7 indicators in the 'physical abuse' domain.

[place Table 8 here]

In accordance with the clinical guidelines that accompany the CTQ, the next analytical stage was to categorise the 'scores' into the four 'abuse' severity bands of 'none or minimal', 'low to moderate', 'moderate to severe' and 'severe to extreme'. The diversity and complexity of 'growing up' experiences reported by the adult drug users in recovery are demonstrated in **Table 9**.

[place Table 9 here]

Of the 91 men and women, there were 56 different 'profiles' of 'abuse' severity (shown in **Table 9**). It was notable that where similarities existed, these were where 'abuse' severity was low or minimal or where it was extreme. These bands of 'abuse' severity may offer the clinician a snapshot of the reported histories of each client and as such are valuable for screening purposes and generating prevalence statistics. A sociological concern is that these 'labels' are quite distant from the actual responses made by the clients. The clinical interpretation is linked to responses to 53 statements on a quantitative research tool and is constrained in its format of being unable to capture detail that was not formally asked. Comparing the four bands of 'abuse severity' for emotional abuse, physical abuse, sexual abuse, emotional neglect and physical neglect by gender, as shown in **Table 10**, it was found

that a significant higher proportion of women compared to men reported severe to extreme experiences of emotional abuse and sexual abuse. Therefore while there can be some confidence in the responses gathered, it can be wholly assumed, in the absence of interpretative methods, that this does not under represent the prevalence of trauma experienced by the study group when growing up.

[place Table 10 here]

Indeed, a count of the number of 'Severe to Extreme' bands for abuse experiences across the five domains presents a definitive picture that, based on the current available data, a third of the women in the study group were clinically classified as reporting severe to extreme histories of 4 or 5 of the 'trauma' domains. This is compared to 3% of the male clients (**Table 11).**

[place Table 11 here]

DISCUSSION

This article has reported on the administration of the Childhood Trauma Questionnaire to one of the largest groups of substance users in residential drug treatment in the UK reported to date. From the present Scottish study, findings suggest that in our female client group, prevalence of emotional abuse was 63.3%, of physical abuse 56.7%, of sexual abuse 66.7%, of emotional neglect 56.7% and of physical neglect 70.0%. The CTQ assessment of substance using women in the wider community has not been conducted so comparative data is unavailable. Some limited comparisons can be made to US studies. In a community sample of IVDU women living in Texas USA, Medrano and colleagues [19] [20] found that in 181 women 83 (45.9%) were emotionally abused, 100 (52.2%) were physically abused, 109 (60.2%) were sexually

abused, 151 (83.4%) were emotionally neglected and 108 (59.7%) were physically neglected which with the exception of emotional neglect displays a similar prevalence pattern. Cohen and Densen-Gerber reported a much lower prevalence of childhood sexual abuse (33%) in women in 6 drug residential facilities using a different assessment tool to the CTQ [23]. But in the absence of a comparison group of CTQ assessments from drug users in the Scottish community or from the general population, it is difficult to contextualise the nature of the 'high' rates of abuse found in this study. So we remain tentative in our findings until further research is conducted in the UK.

In our study we made comparisons of male and female clients as it is increasingly recognised that women have different needs from men [24]. For women substance abusers prevalence for sexual abuse and physical abuse range from 21% to 66% [1] [2] [25] [26]. Drug treatment services are more likely to address the psychosocial factors in women including childhood sexual abuse [27]. It has been consistently shown that two out of three women entering treatment have a history of sexual and physical abuse [28] [1] [2] [29] [30]. However, women with histories of physical abuse or sexual abuse may be labelled as 'difficult' by clinicians during treatment [3].

There is little research using the CTQ in substance using men in treatment or in the community. Rosen and Martin reported in their study of male US soldiers that 50% met criteria for physical abuse and 9% for sexual abuse [11]. Our findings in the male client group, where prevalence of emotional abuse was 43.3%, of physical abuse 45.0%, of sexual abuse 35.0%, of emotional neglect 45.0% and of physical neglect 75.0% confirm that for male substance abusers rates of physical abuse were much higher than sexual abuse [30]. Dunn and colleagues studied 100 men in an inpatient drug treatment program. They reported that 34% of these men experienced at least one form of childhood abuse. Percentages of abuse included the

following: physical abuse (25%), emotional abuse (25%), sexual abuse (6%) and multiple abuse (18%) [30].

Our findings show, as other authors have found (e.g. [19]), that 'abuse' profiles of men and women are multi-dimensional i.e. one domain of abuse on the Childhood Trauma Questionnaire is not mutually exclusive from another in substance using populations Sexual abuse may be the most traumatic and invasive of the abuse types, but severe physical and emotional abuse and neglect are not without implications. It is important for future research in the area of childhood abuse histories in drug users to take into considerations all abuse types, particularly in research with women.

The prevalence statistics for male and female clients from this study are valuable for clinicians, addiction researchers, addiction workers and policy makers. Clinically trained researchers who are interested in the causes and consequences of child abuse and neglect have been previously constrained in their empirical investigations by unvalidated tools [5]. This study constitutes a first step in the effort to assess childhood abuse and understand their prevalence in a help-seeking drug user population. Further sociological research is need to unpick the role of childhood experiences in substance using in adulthood. More clinical socio-ecological research is required to map the linkages between child abuse and neglect and the risk of substance use in adulthood. These prevalence statistics may *under* represent the extent of emotional, physical and sexual 'abuse' (action towards an individual) and emotional and physical 'neglect' (withdrawal of action towards an individual).

We recommend the adoption of the CTQ by clinical psychologists and other professionals working with clients with concerns about their drug use, as a routine clinical assessment tool. When it is used in conjunction with other available data to professionals, it may help identify

individuals for whom their childhood histories have played a role in the development of a range of psychiatric symptoms and behaviour issues such as posttraumatic stress disorder, substance use, depression and anxiety and self-harm [31] . For clinicians, the CTQ could be used as a vehicle for querying drug users about their childhood histories of abuse and could enable the disclosure of further details such as the identity of perpetrators, victimisation of siblings and other family members within the context of a therapeutic encounter. Research suggests that childhood maltreatment is underreported in clinical settings and that systematic assessment may increase rates of disclosure [32]. As such it is a starting point and not a substitute for clinical judgement and a wider portfolio of clinical and social information being collected [17]. Our finding of 56 distinct 'abuse' profiles in 91 residential drug treatment clients is a striking reminder of the diversity of problems of this client group and should act as a warning against broad stroke treatment plans for the 'traumatised in childhood' within this population.

For researchers, important questions remain unanswered especially concerning the social context of initial drug use. This study was unable to collect data relating to age of first traumatic experience or to corroborate with other materials, sibling accounts etc. To disentangle the nature of the trauma-drug abuse relationship further sociologically informed research will need to consider 'trauma' in a broader holistic way – what about poverty experiences in childhood and marginalisation? Substance using women are still a little-known and vulnerable population of which we need to increase our understanding in order to develop effective social policy [21].

Some methodological concerns

We concede that the findings presented here are based on a retrospective small systematic sample which, although larger scale than previous work, still has limited generalizability. Downs and Harrison have provided a critical review of 'childhood maltreament and the risk of substance use' which eloquently reports on methodological issues in the empirical evidence to date, such as variation in the definitions of childhood maltreatment, retrospective and prospective methods, adolescent and adult populations, community and in-treatment populations, sampling procedures and data collection instruments and methods [33]. Likewise, in locating this study within the body of empirical evidence, there are several methodological issues. Finally, this article will discuss some of the major methodological caveats of the present study which relate to using a self-report tool, the interviewers and the researched.

The present study, like all retrospective cross-sectional research into childhood maltreatment, relies on the recall of past events. The participants may have been reluctant to disclose histories in a self-report questionnaire, may have given distorted or otherwise inaccurate responses, felt obliged to respond or have misinterpreted questions due to wording. Our research design did not allow for the corroboration of self-report data from other sources e.g. sharing trauma histories with previous other treatment service providers or social work services. This methodological limitation means that our findings are vulnerable to two concerns; the failure to recall or share positive trauma histories (i.e. false negatives), and reporting inaccurate life histories of past childhood maltreatment (i.e. false positives). One of the motivations to utilise a battery of standardised sub-clinical instruments was to reduce the possibility of false negatives and false positives. Where inconsistencies emerged during the clinical interviews, probes and prompts were used to clarify responses in addition to using cross-check questions. Other authors have suggested such techniques as multiple questions, follow-up questions that clarify the responses more clearly, time frames and use of other important vents to clarify

recall, together with memory aids such as ‘time lines’ to improve the quality of self-reported retrospective data [2].

It was assumed that the self-reports of men and women in residential drug treatment are of acceptable reliability and validity. This can be challenged on the grounds of being a drug user and being in treatment.

Being a drug user is an issue of relevance for the reliability and validity of self report. On the basis of a recent review, there is little reason to reject the use of self-report data as unreliable and invalid [34]. As Darke concludes ‘*The consistency of the findings of drug studies using different methodologies and in different countries is further corroboration of the overall utility of self-report’* ([34] p 262). However, the summary report of an invited European Expert Meeting highlights the crux of the challenge of field-based methods with drug users: *“An unquestionable authenticity is often claimed and allowed to the views of the ex-addict “I know what I’m talking about”, "I’ve been to hell and back”, “I’ve seen it all”* ([35] p 37).

Our research participants report extreme drug use and childhood trauma reports. There may be some limitations of self-report data as it could be argued that if there is a high association between trauma, psychopathology and substance use characterising this sample, then this may be sample biased memory of childhood adversity – i.e. the childhood trauma questionnaire scores are inflated. However, a recent literature review does not support this premise that psychopathology renders memory of childhood experiences inaccurate [36] [37].

There may be issues over the instructions and wording of the CTQ. One team of researchers revised the instructions to “In this section, we would like to know about experiences you may have had before you were 18 years of age” [38] to clarify the age range of experiences referred

to in the phrase ‘when I was growing up’. Another researcher Leora Rosen PhD in her empirical research with male and female soldiers in the US army reports that the inclusion of four screening questions [39], used in a national survey of US adults, highlighted methodological concerns about the wording of some CTQ questions. Finkelhor’s questions asked specific details of abusive experiences such as I) intercourse 2) touching, grabbing or kissing 3) exhibiting body parts or the taking of nude photographs and 4) oral or anal sex. Rosen found that more soldiers responded positively to these four questions - which she classified as being sexually abused - than to the CTQ sexual abuse questions. From the additional data collected by her about soldiers' written and verbal reports she offers the explanation that the soldiers felt it was confusing, that some of the questions referred to a family member perpetrator, while others did not. As a result, their overall impression was that the scale was about familial abuse and they answered the sexual abuse items accordingly. They indicated that their answers to the Finkelhor questions referred to extra-familiar abuse. It is therefore necessary to consider this when examining our findings and adds more weight to our argument that this may be an under representation of the extent of childhood abuse experiences in this population. However, the reverse could also be true – the lack of invasiveness of the CTQ questions may mean that there was greater disclosure as they tended to be embedded in the larger scale of abuse.

Access and recruitment was reliant upon the personal connections of JW in the drug treatment field and her motivation to invest a substantial amount of personal time over and above ‘normal’ working hours. It is uncertain whether other researchers will be able to replicate or build on research in this area if they do not share a ‘credibility’ in the drugs field as e.g. a trainer. A researcher, if not similarly well connected, is likely to face substantial access difficulties. The principal investigator’s approach was to collect data and not ‘counsel’ i.e. additional detail provided during the course of the research interview was dealt with ‘I hear

what you're saying, you have a lot of things going on there that need to be dealt with later' was one way of managing the relationship between the interviewer and the client. Goode argues that in the absence of informational friendship networks, one response of substance using women is to form emotionally significant relationships with their drug worker [21]. Clarity of definition between drug workers and researcher would be needed in this context so as not to exploit the client to disclose more for therapeutic need.

Although the use of staff interviewers leaves the methodology vulnerable to the issue of the power differential between the interviewer (clinical staff member who can 'treat') and the research participant (the 'treated'). It should be assumed that even though assurances that the information collected would not in any way affect their treatment, some participants may have felt coerced into taking part.

Some authors have suggested that interviewees enrolled in treatment may be less likely to admit to illicit behaviours due to a fear of jeopardising their treatment [40] [41] [42]. However, we argue that considering that the participants were in residential treatment, there may not have been a great deal of motivation to conceal information and that the rapport between the interviewer and the participant established by clinical professional-client relations served to facilitate information sharing, of a sensitive and stigmatising nature, within a safe therapeutic context.

Methodological caveats aside, the present findings that childhood abuse and neglect are common experiences amongst substance abusers warrant a wider look at young people and adults with extreme histories of polydrug use.

CONCLUSIONS

The self-reported prevalences of child maltreatment in men and women in residential drug treatment in Scotland were higher than previous US studies of treatment populations and higher than self-reported prevalence in the UK general population. It is possible that in the majority of cases, the positive trauma histories have not been shared with health and social care professionals previously and therefore treatment needs have been unidentified and unmet.

While the authors are aware of the limitations inherent with retrospective self-report data in adults of childhood maltreatment, our findings suggest that considering the scarce resources for places for residential drug treatment, further research should consider the risk of relapse in substance misusing adults who report positive child maltreatment histories. The uptake of accredited training opportunities and the use of the Childhood Trauma Questionnaire as a sub-clinical screening tool prior to engaging in drug treatment service would maximise the benefits of service to client and resource allocation for service provider. Policy moves towards integrated programmes which address both trauma and substance abuse are recommended.

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Table 1: Demographic details of the study group on entering treatment

	All
n =	91[1]
% female	33.3
% aged 16-19 yrs	11.1
% aged 20-29 yrs	56.7
% aged 30-39 yrs	28.9
% aged 40-49 yrs	3.3
% lived alone for past 3 years	12.4
% never married	83.1
% urban dwellers	84.3
% suburban dwellers	9.0
% rural dwellers	6.7
% university educated	9.0
% in employment	4.5
% in debt	53.9
% with some illegal income	67.4

[1]For some of the background variables n<91 if participants declined to disclose personal information.

Table 2: Substance Use of female and male clients in study

Ever used	Women (n=30)			Men (n = 60)		
	n	%	Median age of first use	n	%	Median age of first use
alcohol	28	93.3	14	55	91.7	14
drugs	30	100.0	14	60	100.0	14
heroin	28	93.3	19	56	93.3	18
Cannabis	25	83.3	15	58	96.7	15
pills	25	83.3	17	52	86.7	19
Amphetamines	23	76.3	16	42	70.0	17
methadone	21	70.0	21	50	83.3	24
opiates	16	53.4	17	48	80.0	19
Hallucingens	12	40.0	15	19	31.7	15
Inhalants	12	40.0	14	27	45.0	14
cocaine	11	36.7	18	28	46.7	20
More than 1 substance daily	30	100.0	15	30	100.0	15

Table 3 : Responses to statements defined as indicators of emotional abuse on the CTQ

When I was growing up…	Never true		Rarely true		Sometimes true		Often true		Very often true	
	n	%	n	%	n	%	n	%	n	%
People in my family criticised me										
Women	5	16.7	2	6.7	5	16.7	9	30.0	9	30.0
Men	11	18.3	7	11.7	26	43.3	13	21.7	3	5.0
Someone in my family yelled and screamed at me										
Women	4	13.3	4	13.3	7	23.3	3	10.0	12	40.0
Men	7	11.7	10	16.7	18	30.0	11	18.3	14	23.3
People in my family called me things like “stupid”, “lazy” or “ugly”										
Women	8	26.7	1	3.3	9	30.0	3	10.0	9	30.0
Men	16	26.7	15	25.0	16	26.7	5	8.3	8	13.3
I had to protect myself from someone in my family by fighting, hiding or running away										
Women	8	26.7	5	16.7	2	6.7	5	16.7	10	33.3
Men	29	48.3	11	18.3	10	16.7	3	5.0	7	11.7
I thought that my parents wished I have never been born										
Women	15	50.0	3	10.0	6	20.0	1	3.3	5	16.7
Men	36	60.0	8	13.3	10	16.7	3	5.0	3	5.0
People in my family said hurtful or insulting things to me										
Women	5	16.7	1	3.3	11	36.7	6	20.0	7	23.3
Men	12	20.0	15	25.0	20	33.3	9	15.0	4	6.7
People in my family seemed out of control										
Women	8	26.7	2	6.7	4	13.3	3	10.0	13	43.3
Men	20	33.3	11	18.3	15	25.0	6	10.0	8	13.3
The punishments I received seemed cruel										
Women	11	36.7	4	13.3	3	10.0	2	6.7	10	33.3
Men	26	43.3	11	18.3	10	16.7	8	13.3	5	8.3

Someone in my family hated me										
Women	7	23.3	8	26.7	4	13.3	0		11	36.7
Men	38	63.3	7	11.7	5	8.3	4	6.7	6	10.0
People in my family pushed or shoved me										
Women	8	26.7	3	10.0	6	20.0	5	16.7	8	26.7
Men	20	33.3	14	23.3	16	26.7	6	10.0	4	6.7
I was frightened of being hurt by someone in my family										
Women	5	16.7	6	20.0	2	6.7	3	10.0	14	46.7
Men	31	51.7	5	8.3	12	20.0	3	5.0	9	15.0
I believe that I was emotionally abused										
Women	9	30.0	1	3.3	6	20.0	2	6.7	12	40.0
Men	30	50.0	6	10.0	7	11.7	5	8.3	12	20.0

Table 4: Responses to statements defined as indicators of physical abuse on the CTQ

When I was growing up…	Never true		Rarely true		Sometimes true		Often true		Very often true	
	n	%	n	%	n	%	n	%	n	%
Someone in my family hit or bear me										
Women	11	36.7	4	13.3	5	16.7	2	6.7	8	26.7
Men	28	46.7	9	15.0	9	15.0	7	11.7	7	11.7
I saw my mother or one of my brothers or sisters get hit or beaten										
Women	9	30.0	2	6.7	6	20.0	3	10.0	10	33.3
Men	22	36.7	5	8.3	16	26.7	7	11.7	10	16.7
I got hit so hard by someone in my family that I had to go see a doctor or go to the hospital										
Women	20	66.7	1	3.3	5	16.7	1 3	3.	3	10.0
Men	48	80.0	5	8.3	5	8.3	0		2	3.3
People in my family hit me so hard that it left me with bruises or marks										
Women	14	46.7	1	3.3	4	13.3	1	3.3	10	33.3
Men	34	56.7	8	13.3	6	10.0	5	8.3	7	11.7
I was punished with a belt, a board, a cord or some other hard object										
Women	16	53.3	3	10.0	2	6.7	3	10.0	6	20.0
Men	31	51.7	7	11.7	6	10.0	7	11.7	9	15.0
I believe that I was physically abused										
Women	12	40.0	3	10.0	3	10.0	0		12	40.0
Men	43	71.7	2	3.3	6	10.0	1	1.7	8	13.3
I got hit or beaten so badly that it was noticed by someone like a teacher, neighbour or doctor										
Women	20	66.7	0		4	13.3	2	6.7	4	13.3
Men	50	83.3	2	3.3	6	10.0	0		2	3.3

Table 5: Responses to statements defined as indicators of sexual abuse on the CTQ

When I was growing up…	Never true		Rarely true		Sometimes true		Often true		Very often true	
	n	%	n	%	n	%	n	%	n	%
I believe that one of my brothers or sisters might have been molested										
Women	25	83.3	0		2	6.7	0		3	10.0
Men	55	91.7	0		2	3.3	0		3	5.0
I had sex with an adult or someone who a lot older than me (someone at least 5 years older than me										
Women	13	43.3	0		8	26.7	5	16.7	4	13.3
Men	40	66.7	6	10.0	10	16.7	1	1.7	3	5.0
Someone tried to touch me in a sexual way or tried to make me touch them										
Women	14	46.7	0		6	20.0	3	10.0	7	23.3
Men	53	88.3	3	5.0	3	5.0	0		1	1.7
Someone threatened to hurt me or tell lies about me unless I did something sexual with them										
Women	18	60.0	0		4	13.3	3	10.0	5	16.7
Men	58	96.7	0		0		1	1.7	1	1.7
Someone tried to make me do sexual things or watch sexual things										
Women	15	50.0	0		5	16.7	1	3.3	9	30.0
Men	55	91.7	3	5.0	0		0		2	3.3
Someone molested me										
Women	14	46.7	1	3.3	5	16.7	1	3.3	9	30.0
Men	57	95.0	0		1	1.7	0		2	3.3
I believe that I was sexually abused										
Women	14	46.7	1	3.3	4	13.3	11	36.7	0	
Men	57	95.0	0		1	1.7	2	3.3	0	

Table 6: Responses to statements defined as indicators of emotional neglect on the CTQ (where rarely or never true responses are undesirable)

When I was growing up…	Never true		Rarely true		Sometimes true		Often true		Very often true	
	n	%	n	%	n	%	n	%	n	%
There was someone in my family whom I could talk to about my problems										
Women	9	30.0	2	6.7	9	30.0	2	6.7	8	26.7
Men	12	20.0	4	6.7	17	28.3	7	11.7	20	33.3
People in my family showed confidence in me and encouraged me to succeed										
Women	4	13.3	3	10.0	5	16.7	5	16.7	13	43.3
Men	5	8.3	6	10.0	15	25.0	14	23.3	20	33.3
I knew that there was someone to take care of me and protect me										
Women	4	13.3	1	3.3	8	26.7	1	3.3	16	53.3
Men	1	1.7	1	1.7	13	21.7	13	21.7	32	53.3
There was someone my family whom I admired and wanted to be like										
Women	9	30.0	1	3.3	6	20.0	3	10.0	11	36.7
Men	18	30.0	8	13.3	7	11.7	16	26.7	11	18.3
There was someone in my family who helped me feel that I was important or special										
Women	5	16.7	2	6.7	7	23.3	2	6.7	14	46.7
Men	5	8.3	6	10.0	16	26.7	12	20.0	21	35.0
There was someone in my family who wanted me to be a success										
Women	4	13.3	3	10.0	1	3.3	6	20.0	16	53.3
Men	3	5.0	3	5.0	11	18.3	14	23.3	29	48.3
I felt loved										
Women	4	13.3	2	6.7	10	33.3	3	10.0	11	36.7
Men	2	3.3	7	11.7	11	18.3	15	25.0	25	41.7
My parents tried to treat all of us children the same										
Women	7	23.3	2	6.7	5	16.7	4	13.3	12	40.0
Men	4	6.7	7	11.7	7	11.7	13	21.7	29	48.3

There was someone in my family who made sure I stayed out of trouble										
Women	13	43.3	2	6.7	2	6.7	6	20.0	7	23.3
Men	13	21.7	10	16.7	16	26.7	8	13.3	13	21.7
There was someone older than myself (like a teacher or a parent) who was a positive role model for me										
Women	12	40.0	1	3.3	4	13.3	3	10.0	10	33.3
Men	22	36.7	10	16.7	10	16.7	10	16.7	8	13.3
People in my family looked out for each other										
Women	11	36.7	1	3.3	6	20.0	2	6.7	10	33.3
Men	5	8.3	4	6.7	13	21.7	14	23.3	24	40.0
People in my family tried to keep me away from bad influences										
Women	7	23.3	1	3.3	6	20.0	4	20.0	12	40.0
Men	4	6.7	5	8.3	15	25.0	10	16.7	26	43.3
People in my family encouraged me to stay in school and get an education										
Women	7	23.3	2	6.7	1	3.3	5	16.7	15	50.0
Men	8	13.3	4	6.7	9	15.0	15	25.0	24	40.0
People in my family felt close to each other										
Women	7	23.3	3	10.0	8	26.7	3	10.0	9	30.0
Men	4	6.7	6	10.0	15	25.0	17	28.3	18	30.0
Someone in my family believed in me										
Women	3	10.0	4	13.3	3	10.0	5	16.7	15	50.0
Men	1	1.7	9	15.0	18	30.0	12	20.0	20	33.3
My family was a course of strength and support										
Women	10	33.3	2	6.7	6	20.0	5	16.7	7	23.3
Men	6	10.0	9	15.0	17	28.3	16	26.7	12	20.0

Table 7: Responses to statements defined as indicators of physical neglect on the CTQ

When I was growing up…	Never true		Rarely true		Sometimes true		Often true		Very often true	
	n	%	n	%	n	%	n	%	n	%
I didn't have enough to eat										
Women	25	83.3	3	10.0	2	6.7	0		0	
Men	50	83.3	6	10.0	2	3.3	0		2	3.3
I lived in a group home or foster home										
Women	23	76.7	2	6.7	1	3.3	1	3.3	3	10.0
Men	48	80.0	0		3	5.0	5	8.3	4	6.7
I was living on the streets by the time I was a teenager or even younger										
Women	17	56.7	2	6.7	3	10.0	1	3.3	7	23.3
Men	45	75.0	1	1.7	5	8.3	2	3.3	7	11.7
My parents were too drunk or high to take care of the family										
Women	19	63.3	3	10.0	4	13.3	0		4	13.3
Men	37	61.7	7	11.7	6	10.0	5	8.3	5	8.3
People in my family got into trouble with the police										
Women	10	33.3	3	10.0	8	26.7	2	6.7	7	23.3
Men	24	40.0	11	18.3	12	20.0	5	8.3	8	13.3
I had to wear dirty clothes										
Women	23	76.7	2	6.7	2	6.7	3	10.0	0	
Men	49	87.7	5	8.3	6	10.0	0		0	
I lived with different people at different times (like different relatives or foster family)										
Women	19	63.3	2	6.7	4	13.3	1	3.3	4	13.3
Men	39	65.0	3	5.0	12	20.0	4	6.7	2	3.3
I spent time out of the house and non one knew where I was										
Women	5	16.7	7	23.3	2	6.7	5	16.7	11	36.7
Men	9	15.0	10	16.7	19	31.7	14	23.3	8	13.3

Table 8: Comparisons between male and female users undergoing treatment across the domains of the Childhood Trauma Questionnaire (n=90)

	Males (n=60)		Females (n=30)		Chi-square
	Mean	SD	Mean	SD	P value
Emotional abuse	28.8	12.1	37.9	14.2	0.002
Physical abuse	13.8	7.9	17.7	9.8	0.045
Sexual abuse	8.8	4.0	17.0	10.2	0.001
Emotional neglect	38.9	14.3	42.4	17.8	0.314
Physical neglect	15.0	5.6	16.6	7.3	0.253

Table 9: Clinical interpretation of the childhood histories of study group of 91 adults in residential drug treatment

Emotional abuse	Physical abuse	Sexual abuse	Emotional neglect	Physical neglect	N
None or minimal					7
None or minimal				Low to Moderate	12
None or minimal				Moderate to Severe	1
None or minimal			Low to moderate	Moderate to Extreme	1
None or minimal			Low to moderate	None or minimal	3
None or minimal			Moderate to Extreme	Low to Moderate	2
None or minimal			Moderate to Extreme	Moderate to Extreme	1
None or minimal			Severe to Extreme		2
None or minimal		Low to moderate	Moderate to Severe	Severe to Extreme	1
None or minimal		Low to moderate	None or minimal	Moderate to Severe	2
None or minimal		Low to moderate	None or minimal		4
None or minimal		Low to moderate	None or minimal	Severe to Extreme	1
None or minimal		Severe to Extreme	None or minimal		2
None or minimal	Low to moderate	None or minimal	Low to moderate		1
None or minimal	Low to moderate	None or minimal		Low to moderate	2
None or minimal	Low to moderate	None or minimal			2
None or minimal	Low to moderate	Moderate to Severe	None or minimal		1
None or minimal	Moderate to Severe	None or minimal		Low to moderate	1
Low to moderate	None or minimal			Moderate to Severe	1
Low to moderate	None or minimal		Severe to Extreme	Moderate to Severe	1
Low to moderate	None or minimal	Low to moderate		Moderate to Severe	1
Low to moderate	None or minimal	Severe to Extreme	None or minimal	Low to moderate	1
Low to moderate	None or minimal	Severe to Extreme	None or minimal		1
Low to moderate		None or minimal			2
Low to moderate			Severe to	Moderate to	1

			Extreme	Severe	
Low to moderate	Moderate to Severe	None or minimal	Moderate to Severe		1
Low to moderate	Moderate to Severe	Low to moderate	Moderate to Severe		1
Low to moderate	Severe to Extreme	None or minimal	Moderate to Severe		1
Low to moderate	Severe to Extreme	Low to moderate	Moderate to Severe	Severe to Extreme	1
Moderate to Severe	None or minimal		Moderate to Severe	Low to Moderate	1
Moderate to Severe	None or minimal			Severe to Extreme	1
Moderate to Severe		Low to moderate		Moderate to Severe	1
Moderate to Severe			Low to Moderate	Moderate to Severe	1
Moderate to Severe	Severe to Extreme	None or minimal	Low to moderate	Moderate to Severe	1
Moderate to Severe	Severe to Extreme	Moderate to Severe		Low to Moderate	1
Moderate to Severe	Severe to Extreme	Moderate to Severe			1
Severe to Extreme	None or minimal	Severe to Extreme	None or minimal		1
Severe to Extreme	Low to moderate	None or minimal	Severe to Extreme		1
Severe to Extreme	Moderate to Severe	Low to moderate	None or minimal	Severe to Extreme	1
Severe to Extreme	Moderate to Severe		Low to Moderate	None or minimal	1
Severe to Extreme		None or minimal		Moderate to Severe	1
Severe to Extreme		None or minimal	Low to moderate	None or minimal	1
Severe to Extreme		None or minimal	Low to moderate	Severe to Extreme	1
Severe to Extreme		None or minimal	Severe to Extreme		1
Severe to Extreme		Low to moderate		Moderate to Severe	2
Severe to Extreme		Low to moderate		Severe to Extreme	2
Severe to Extreme		Low to Moderate	Moderate to Severe	Severe to Extreme	1
Severe to Extreme		Low to Moderate	Severe to Extreme		1
Severe to Extreme		Moderate to Severe	Low to Moderate	Moderate to Severe	1
Severe to Extreme		Moderate to Severe	None or minimal	Severe to Extreme	1

Severe to Extreme	Moderate to Severe			1
Severe to Extreme	Moderate to Severe	Severe to Extreme		1
Severe to Extreme		None or minimal	Severe to Extreme	2
Severe to Extreme		Low to moderate	Severe to Extreme	1
Severe to Extreme		Moderate to Severe	Severe to Extreme	2
Severe to Extreme				3

Table 10: Comparisons between 60 male and 30 female users undergoing treatment across the domains (and their clinical interpretation) of the Childhood Trauma Questionnaire

	None or minimal		Low to Moderate		Moderate to Severe		Severe to Extreme		P value
	n	%	n	%	n	%	n	%	
Emotional abuse									
Women	11	36.7	3	10.0	1	3.3	15	50.0	
Men	34	56.7	9	15.0	6	10.0	11	18.3	0.018
Physical abuse									
Women	13	43.3	2	6.7	3	10.0	12	40.0	
Men	33	55.0	8	13.3	4	6.7	15	25.0	0.374
Sexual abuse									
Women	10	33.3	4	13.3	5	16.7	11	36.7	
Men	39	65.0	15	25.0	4	6.7	2	3.3	<0.001
Emotional neglect									
Women	13	43.3	7	23.3	4	13.3	6	20.0	
Men	33	55.0	11	18.3	11	18.3	5	8.3	0.346
Physical neglect									
Women	9	30.0	4	13.3	6	20.0	11	36.7	
Men	15	25.0	17	28.3	15	25.0	13	21.7	0.260

Table 11: Frequency of Severe to Extreme clinical interpretations from 5 domains CTQ data (range 0 – 5) by gender

No. of Severe to Extreme domains	Women		Men		All	
	n	%	n	%	n	%
0	11	36.7	37	61.7	48	53.3
1	4	13.3	10	16.7	14	15.6
2	6	20.0	5	8.3	11	12.2
3	0	0	6	10.0	6	6.7
4	6	20.0	2	3.3	8	8.9
5	3	10.0	0	0	3	3.3