THE OPIATE TREATMENT INDEX

(OTI)

MANUAL

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National Drug and Alcohol Research Centre
University of New South Wales
NSW, Australia

1991

Technical Report Number 11

ISBN 0 947 229 23 X

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The Opiate Treatment Index

1.0 INTRODUCTION

One of the major problems of opiate treatment evaluation research has been the lack of comparability of research findings. Studies vary both in the domains selected as outcome variables and in the criteria for "success" within these domains. For example, some major outcome studies concentrate exclusively on drug use and criminality as outcome variables (e.g. DeLeon, 1986; DeLeon et al, 1986), whereas others regard factors such as employment and psychiatric status as also constituting relevant outcome domains (Hubbard et al, 1983; McLellan et al, 1986; Simpson & Marsh, 1986).

Even when variable domains are comparable between studies, the manner in which these variables are measured renders comparability difficult. The area of drug use provides the most salient example of this. In many studies complete abstinence is used as the criterion for success, and the percentage of clients who achieve abstinence is what is reported (e.g. DeLeon, 1986). Other studies report frequency of use of substances (e.g. Hubbard et al, 1986), while still others report time to relapse (Fisher & Anglin, 1987; Simpson et al, 1982). The consequence of these discrepancies in methodology is the virtual impossibility of comparisons between studies.

One of the reasons for the non-comparability described above is the differing values of various researchers regarding the relevant goals of treatment. Another major contributor to the present situation has been the relative absence of standardized instruments in the area of opiate treatment outcome research. Researchers have, on the whole, employed questionnaires which are, unique to their studies, of unknown validity and reliability.

The aim of the present project was to provide a comprehensive, standardized set of measures for the evaluation of opiate treatment. In constructing the Opiate Treatment Index (OTI) as a comprehensive evaluative tool, the authors considered that a number of criteria should be met:

(i) The primary consideration was that the index should be multi-dimensional in nature. Clearly, the aims of opiate treatments extend beyond the cessation or reduction of drug use. Opiate use is associated with a broad range of health, legal and social problems. Furthermore, there is evidence that the problems associated with opiate use are relatively independent (e.g. McLellan et al, 1981). An assessment instrument should reflect this heterogeneity in its structure.

(ii) The instrument should be based upon objective data rather than on the impressions of interviewers. This is to avoid the problems engendered by the differing criteria for "success" employed by different researchers. What such objective scales should provide are data on the recent behaviour of clients in a number of outcome domains. Obviously the interpretation of the data regarding success or failure will depend upon the ideology of the researcher. This should, however, be independent of data collection.

(iii) The variables employed should, if possible, be continuous rather than categorical, in order to maximize the sensitivity of the instrument to actual behaviour change.

(iv) To be of maximum utility, such an instrument should have both clinical and research applications. The scales should provide information which is of interest to clinical staff, as well as providing global research data.

(v) To be of use in clinical settings, an assessment instrument should be relatively brief and easy to administer. The instrument must be able to be employed by both medical and non-medical personnel, given the diversity of staff engaged in both the clinical and research aspects of opiate treatment.

(vi) Such an instrument should be of proven reliability and validity.

The OTI was constructed to meet these criteria. A complete description of the OTI and data concerning its reliability and validity can be found in Darke et al (1992). The OTI has also subsequently been successfully tested for reliability and validity in the United Kingdom (Adelekan et al, 1996a) and New Zealand (Deering & Sellman, 1996).

As with all assessment instruments, there are problems in obtaining accurate data in a clinical setting that do not arise in an anonymous research setting. However, in a study addressing this issue (Adelekan et al, 1996b) had researchers and clinicians separately conduct OTI interviews among London methadone maintenance patients. There were no significant differences between reports to researchers and clinicians of heroin use, injecting frequency, crime or HIV risk-taking in the preceding month. It should be noted, however, that assurances were given to subjects that their reports would have no effect on their treatment, regardless of the interviewer. This issue is discussed further in the section on the psychometric properties of the OTI.

It should be emphasised that the OTI should not be considered as an alternative to a clinical assessment. Rather, it provides data on key variables over a range of outcome domains. There will always be other variables of interest to clinicians which are not covered in the OTI.

2.0 THE STRUCTURE OF THE OTI

The OTI consists of six independent outcome domains. The domains chosen to reflect the dimensions of treatment outcome were: Drug Use, HIV Risk-taking Behaviour, Social Functioning, Criminality, Health Status, and Psychological Adjustment. The OTI is presented in Appendix 2.

In all of the scales, the higher the obtained score, the greater the degree of dysfunction. With the exception of the Social Functioning section, all questions concern behaviour in the month prior to the day of interview. This period was selected to gain a measure of a subject's current behaviour, and to maximize the accuracy of recall. The Social Functioning scale covers the preceding six months. This was considered appropriate to the subject matter of this domain. The Index was designed for interviewer administration as pilot testing had indicated that drug users had difficulty in self-administering scales. Interviewer administration was also thought to enhance the collection of accurate information by allowing for the clarification of the subject's responses.

A brief mention should be made at this point of the distinction between drug related problems and drug dependence (Edwards & Gross, 1976; Edwards et al, 1981). Dependence is seen by a great many authors as constituting a distinct dimension from the problems associated with drug use. This dimension includes such factors as the physical and affective aspects of withdrawal when drug use is stopped. Drug related problems are conceived of as problems which arise for the individual as a consequence of their drug use, e.g. criminal convictions. The OTI does not directly assess the opiate dependence of the individual. Rather, it examines the recent behaviour of the individual over a range of outcome domains. The focus is thus on actual behaviour and behaviour change. It should be noted that in the case of methadone maintenance, a measurement of current dependence is difficult to obtain, as the client is continuing to consume an opioid. A quick five item measure of current dependence, the Severity of Dependence Scale (SDS) has shown good psychometric properties for measuring current dependence on heroin, amphetamines and cocaine (Gossop et al, 1995).

Distributions of the OTI scale scores are presented at the end of this manual in Appendix 1.

3.0 ADMINISTERING THE OTI

3.1 GENERAL COMMENTS

The OTI is a structured interview, and typically takes 30 minutes to administer. As with any interview in this area, the quality of the information obtained will, in part, be dependent upon the rapport established between the interviewer and the client. One of the major factors in building up this rapport is the guarantee of confidentiality. Clients should be assured that the information they provide is confidential, and that what they say will in no way be held against them. A relaxed, non-judgemental attitude on the part of the interviewer also helps in the building up of rapport. Finally, it is a great advantage to be aware of the "street talk" of the client group. Awareness of slang names for particular drugs not only encourages rapport, but also increases the understanding of the interviewer when (as is often the case) the client uses a great deal of slang.

3.2 SECTION I: DEMOGRAPHICS/TREATMENT HISTORY

The main concern of this section is to gather simple information about the subject and his or her treatment history. Question 6 refers to the total number of times that the client has been in any type of opiate treatment.

3.3 SECTION II: DRUG USE

The drug use domain, like the other treatment outcome domains, examines the reported recent behaviour of the client. As such, it does not rely on the client making quantity/frequency estimates of their recent "average" use, a methodology which is known to grossly under-report consumption (Gregson & Stacey, 1980). Rather, recent behaviour is examined by collecting information on the last three days of drug use for each drug category. This is an adaptation of a method originally employed in alcohol research (Gregson & Stacey, 1980, 1982). The intervals between days of drug use, and the amounts consumed on these days, are employed to estimate recent consumption. Data are obtained on recent use in eleven drug categories: heroin, other opiates, alcohol, cannabis, amphetamines, cocaine, tranquillizers, barbiturates, hallucinogens, inhalants, and tobacco. For more information on the reliability and validity of the drug use section, readers are referred to Darke et al (1991b).

The major problem involved in obtaining estimates of illicit drug consumption is that, unlike alcohol, quantities consumed are not standardized. There is no equivalent of a "standard drink" for heroin or cocaine. A standard drink is one which contains roughly 10 grams of ethanol e.g. a glass of wine. The actual amount consumed of illicit substances is extremely difficult, if not impossible, to determine. A street "weight" of heroin will vary in amount as well as in purity. Prices fluctuate, so this cannot be used as a measure of amount. Given these difficulties, the OTI was designed to measure use episodes, rather than the amount per occasion of use. This measure will reflect the degree of drug involvement of the client. For instance, for heroin, the number of injections per day of use is obtained. In terms of drug involvement, a person who is injecting three times a day may be seen as being more involved than someone who

injects once every second day.

For each drug class, the subject is asked when their three most recent days of drug use occurred, and how much they used on the last two occasions. The intervals between days of drug use are taken as an estimate of frequency of use, and the number of use episodes on the last two occasions is taken as an estimate of quantity consumed. This allows a simple calculation to be made on the basis of how much of the drug they are taking and how often they are taking it. It is important to note that use on the day of interview is not recorded, because that is not an example of a full day's use.

When asking about drugs in this section it is helpful to know the slang terms for each drug and administration modes. This enhances the rapport with the subject and enhances understanding. Clearly slang will vary from place to place and over time.

In order to illustrate the procedure the questions from the heroin section will be used as an example. The subject is asked a series of questions as set out below:

1. ***On what day did you last use heroin?***

The day is recorded and acts as the baseline for estimating use frequency. Again, note that use on the day of interview does not count.

2. ***How many hits/smokes/snorts did you have on that day?***

Record the number of hits, snorts, or smokes reported by the subject. The number of hits or smokes is an estimate of quantity consumed on that day. As already discussed, given the variations in heroin purity, and in the amounts contained in `street weights' etc., this is considered to be a better estimate of both quantity and degree of involvement than asking the subject to estimate how much they actually inject.

3. ***On which day before that did you use heroin?***

Write down the day, and code how many days before the previous use day it was. Write down the day.

4. ***And how many hits/smokes did you have on that day?***

Record the number of hits or smokes reported by the subject for their second last day of heroin use.

5. ***And when was the day before that?***

Write down the day, and record the number of days between the second last day of heroin use and this episode.

The data obtained from the subject is then used to get an estimate of recent consumption by the simple formula :

$$Q = \frac{q1 + q2}{t1 + t2}$$

where Q = average amount per day

q1 = amount consumed on the last use occasion

q2 = amount consumed on the second last use occasion

t1 = interval between the last day of drug use and the next to last use day

t2 = interval between the second and third last days of drug use

That is, simply add the number of use episodes reported by the subject, and divide by the total of the two intervals between use reported. Some examples of this procedure are set out below.

Example 1

Last use?	**Friday**
How much?	**4 hits**
Time before?	**Thursday (or 1 day before) (t1=1 day)**
How much?	**4 hits**
Time before that?	**Wednesday (or 1 day before) (t2=1 day)**

So, q1=4, q2=4, t1=1, t2=1

$$Q = \frac{4 + 4}{1 + 1}$$

$$= 4$$

The subject, then, has an average of 4 injections per day.

Example 2

Last use?	**Friday**
How much?	**1 hit**
Time before?	**Monday (or 4 days before) (t1=4 days)**
How much?	**1 hit**
Time before that?	**Thursday (or 4 days before) (t2=4 days)**

So, q1=1, q2=1, t1=4, t2=4

$$Q = \frac{1 + 1}{4 + 4}$$

$$= 0.25$$

The subject injects on average a quarter of an injection a day, or one every 4 days. As can be seen in the examples set out above, the higher the value of `Q', the heavier the use of the drug. In the case of injectable substances like heroin, the table below gives a broad guide to the interpretation of Q scores.

Quantity/Frequency	**Q**
Abstinence	**0.00**
Once a week or less	**0.01 - 0.13**
More than once a week	**0.14 - 0.99**
Daily	**1.00 - 1.99**
More than once a day	**2.00 or more.**

The time frame for the questionnaire is 4 weeks. If the subject has not used a drug in the last 4 weeks, Q is recorded as zero. The purpose of the OTI is to assess current behaviour and therefore past behaviour is not taken into account.

If the subject has only had either one or two use days in the last 4 weeks, Q is determined by dividing the amount consumed on the use day(s) by 28, i.e., one use day, Q = q1/28; two use days, Q = q1 + q2 / 28.

Example 3 (one use episode)

Last use?	**Friday**
How much?	**1 hit**
Time before?	**6 months ago**
How much?	**N/A**
Time before that?	**N/A**

$$Q = \frac{1}{28}$$

$$= 0.04$$

Example 4 (two use episodes)

Last Use?	**Friday**
How much?	**1 hit**

Time before?	**2 weeks before**
How much?	**1 hit**
Time before that?	**6 months ago**

$$Q = \frac{1 + 1}{28}$$

$$= 0.07$$

The way in which each drug class is scored is dealt with class by class below.

Heroin

The unit of measurement is the number of injections (shots, hits, etc.) or the number of smokes or snorts the subject had on the day.

Other Opiates

Score injected substances as for heroin. In the case of opiates taken orally, the OTI scores the number of use episodes for that day. In the case of liquid preparations (e.g., codeine linctus), try to elicit the number of times the subject took the preparation, not the number of bottles drunk. If the subject drank two bottles in four episodes, then their score for that day will be four. In the case of tablets, try to determine how many times that day the subject took them. Twenty tablets taken ten at a time on two occasions would result in a score of two.

Alcohol

The unit of measurement is the number of standard drinks the subject had on the use day. A standard drink may be defined as a 120 ml glass of wine, a 285 ml glass of beer, or a 30 ml nip of spirits. For a discussion of standard drinks, see Miller, Heather, & Hall (1991).

Cannabis

The unit of measurement is the number of joints or bongs the subject had on the day of cannabis use.

Amphetamines

The unit of measurement is the number of hits, snorts etc. the subject had on the day of

amphetamine use.

Cocaine

The unit of measurement is the number of hits, smokes or snorts the subject had on the day of cocaine use.

Tranquillizers

The unit of measurement is the number of pills the subject had on the day of tranquillizer use.

Barbiturates

The unit of measurement is the number of pills the subject had on the day of barbiturate use.

Hallucinogens

The unit of measurement is the number of tabs, trips etc. the subject had on the day of hallucinogen use.

Inhalants

The unit of measurement is the number of sniffs the subject had on the day of inhalant use.

Tobacco

The unit of measurement is the number of cigarettes the subject smoked on the day of tobacco use.

The Q scores for each drug class are recorded in the Scoresheet, as is the Poly-drug total. The poly-drug score is the number of drug classes the person has used during the month preceding the interview (including alcohol and tobacco).

3.4 SECTION III: HIV RISK-TAKING BEHAVIOUR

The HIV Risk-taking Behaviour Scale (HRBS) is designed to measure the behaviour of injecting drug users that puts them at risk of either contracting, or passing on, the Human Immunodeficiency Virus (HIV) and other blood borne viruses (e.g. hepatitis B and C). Two predominant areas of concern exist in relation to the spread of HIV amongst this population and, via this route, to the broader community: needle use behaviour and sexual behaviour.

Research up to the present has found that high rates of needle sharing have been a common practice for some IDU (Morlet et al, 1990; Skidmore et al, 1989; Stimson et al,

1988). It is now well known that the sharing of needles and syringes puts the IDU concerned at risk for HIV via the transmission route of HIV-contaminated blood (Centers for Disease Control, 1989). Given the high incidence of needle sharing among IDU, injection equipment cleaning practices are of critical importance. Bleach has been shown to be viricidal and there have been education campaigns in many countries to encourage IDU to clean their equipment with bleach if they are going to share. It should be noted that since the design of the HRBS the efficacy of bleach as a means of cleaning contaminated needles has been questioned (Shapshak et al, 1993).

The sexual behaviour of IDU is also of major importance, both from the perspective of the spread of HIV within that population and in relation to the spread of the virus to the non-injecting drug using population (Feucht et al, 1990; Robertson et al, 1988). It is not uncommon for female, and to a lesser extent male, IDU to support their drug use by prostitution (van den Hoek et al, 1989; Philpot et al, 1989). Engaging in prostitution is another potential area of risk for IDU, not only for themselves but for their customers if they engage in unsafe sexual practices. Finally, one sexual practice that has consistently been shown to be a high risk activity in relation to the spread of HIV is penetrative anal sex (Turner et al, 1989). In order for an instrument to thoroughly assess the HIV risk-taking behaviour of IDU, all of the issues discussed above have to be covered. It is not sufficient to address just those behaviours directly related to injecting drug use.

The HRBS measures HIV risk-taking behaviours in two sections, one for drug use and one for sexual activity, and takes into account both the risk to IDU themselves and the risk they pose to others. For information concerning its reliability, validity and other psychometric properties see Darke et al (1991a).

a) Drug Use Section

Question 1. ***How many times have you hit up (injected any drugs) in the last month?***

If the subject has trouble answering the question then a prompt like, "How often have you hit up? Once a week? Once a day? etc.", will help them to understand what kind of frequency information is required. If the subject has not injected in the month prior to the interview, record zero for Drug Use Sub-total and go on to the Sexual Behaviour Section.

Question 2. ***How many times in the last month have you used a needle after someone else had already used it?***

Record the number of times the subject has injected with a needle that another person has already injected with, whether the needle shared had been cleaned before re-use or not. If the subject has a sexual partner, it is important to clarify for all the questions concerned with needle sharing that sharing includes their partner as well. Many IDU do not regard sharing with their sexual partner as `true' sharing. It may be necessary to probe for this information.

Question 3. ***How many people have used a needle before you in the last month?***

Question 3 is concerned with how many different people had used any needles before them. This means the total number of different individuals in the month prior to the interview who used a needle before the subject, and includes sexual partners.

Question 4. ***How many times in the last month has someone used a needle after you have used it?***

As with Questions 2 and 3, it may be necessary to question the subject further concerning their sexual partner. This question is concerned with the risk the subject might pose to other IDU through sharing needles.

Question 5. ***How often, in the last month, have you cleaned needles before re-using them?***

This question is concerned with any needles the subject has re-used in the last month, whether borrowed from another person or re-using their own needles.

Question 6. ***Before using needles again, how often in the last month did you use bleach to clean them?***

Given that bleach is known to be viricidal, Question 6 asks whether the subject has used bleach to clean their needles before re-using them. Again, this refers to any needles the subject has re-used in the last month, whether borrowed from another person or re-using their own needles.

b) Sexual Behaviour Section

Questions 7 - 11 are concerned with sexual behaviour, and because this is a new topic it is suggested that this is signalled to the subject by saying something like, "The next few questions are about your sex life over the last month". Depending upon the nature of the rapport already established, it may be necessary to inform the subject that the questions are going to be about very private matters and to reaffirm the confidentiality of the interview.

Question 7. ***How many people, including clients, have you had sex with in the last month?***

It is important in asking this question to ensure that prostitutes' clients are included, as many prostitutes make a distinction between clients and their personal life. All questions in the Sexual Behaviour Section refer to penetrative sex, i.e. sex where there is some penetration of the vagina or anus with the penis. If the subject had no penetrative sex in the month prior to the interview, record zero for sexual behaviour and terminate the interview. Do not include oral sex, as the riskiness of this activity is unknown at this time. Also do not include lesbian sex. The risk of female to female sexual transmission is considered to be negligible at this time.

Question 8. ***How often have you used condoms when having sex with your regular partner(s) in the last month?***

`Regular partner(s)' in this question refers to any person the subject regularly has sex with, i.e., the subject may have more than one regular sexual partner. Do not include sexual activity that does not involve penetration with the penis.

Question 9. ***How often did you use condoms when you had sex with casual partners in the last month?***

`Casual partners' means any person that the subject had penetrative sex with in the month prior to the interview who is not a regular sexual partner and is not a paying client. Prostitutes who the subject has paid for sex are regarded as casual partners.

Question 10. ***How often have you used a condom when you have been paid for sex in the last month*?**

Question 10 asks the subject about any instances where they have exchanged sex for money or drugs in the month prior to the day of interview. Again include only anal or vaginal penetrative sex.

Question 11. ***How many times did you have anal sex in the last month?***

Anal sex refers to the insertion of the penis into the anus. Count instances of both active and passive anal sex, both with and without a condom.

SCORING THE HRBS

For each of the two sub-sections, add up the score for each of the questions; for the total score add up the two sub-totals. The HRBS provides three scores: a total score indicating level of HIV risk-taking behaviour; a Drug Use Sub-total indicating level of risk due to drug taking practices; and a Sexual Behaviour Sub-total indicating level of risk associated with unsafe sex. In all cases, the higher the score the greater the risk the subject has of contracting and passing on HIV.

3.5 SECTION IV: SOCIAL FUNCTIONING

One of the aims of opioid treatment is to encourage the social integration of the client. The Social Functioning Scale addresses such major aspects of social integration as employment, residential stability, and inter-personal conflict. The scale also addresses social support, that is, the existence of people on whom the individual can rely in times of stress. This is of particular relevance given the stress associated with opioid dependence. Finally, the scale specifically addresses the involvement of the individual in the drug sub-culture, e.g. whether the person is living with current users and how many of their friends are current users.

Question 1. ***How many different places have you lived in over the last six months?***

Include gaol, refuges etc. as places of residence.

Question 2. ***How much of the last six months have you been unemployed?***

Employment includes full-time work, permanent part-time work, home duties, pension recipients (include single mother, people with disabilities, etc.) and prostitution (if it is legal in the area where the OTI is being administered). Do not include people on unemployment benefits or people on sickness benefits for drug-related problems.

Question 3. ***How many different full-time jobs have you had in the last six months?***

Include under the term full-time work anyone whose usual employment is permanent part-time and the other categories referred to above in the discussion of Question 2.

Question 4. ***How often in the last six months have you had conflict with your relatives*?**

Conflict here refers to arguments, disputes, "hassles generally" etc.. It is usually helpful to show the interviewee the scale and to let them choose the term that they feel best describes the frequency of conflict they have had over the six months prior to the interview. If the person has no family or has not been in contact with them in the last 6 months, circle N/A and score the item as 0.

Question 5. ***How often in the last six months have you had conflict with your partner(s)?***

If the person has no partner or has not been in contact with them in the last six months, circle N/A and score the item as 0.

Question 6. ***How often in the last six months have you had conflict with your friends?***

Friends in this case refers to acquaintances, as well as close friends. Basically, this question refers to the people the person "hangs around with". If the person has no friends, circle N/A and score the item as 4. The reason for this is that it indicates the absence of any social support.

Question 7. ***About how many close friends would you estimate that you have?***

Close friends may be defined as people that the person feels that they can rely on. If the subject has a sexual partner, make sure they are included in the estimate.

Question 8. ***When you are having problems, are you satisfied with the support you get from your friends?***

Anything which causes the subject distress can be viewed as a problem e.g. financial, emotional, etc. If the person is insistent that they do not ask their friends for help, circle N/A, and score 0 for the item.

Question 9. ***About how often do you see your friends*?**

If the person has no friends, circle N/A and score the item as 4. As with Question 6, the reason for this is that it indicates the absence of any social support.
Question 10. ***How many of the people you hang around with now have you known for more than six months?***

If the person has no friends, circle N/A and score the item as 4. As with Questions 6 and 9, the reason for this is that it indicates the absence of any social support.

Question 11. ***How much of the last six months have you been living with anyone who uses heroin?***

Anyone who has injected in the six months prior to the interview should be considered, for the purposes of the OTI, a drug user. Include both sexual partners and housemates.

Question 12. ***How many of the people you hang around with now are users?***

This question refers to acquaintances as well as close friends. If the subject has a sexual partner who is a current user, make sure they are included in the estimate. As in the previous question, anyone who has injected in the six months prior to the interview should be considered a drug user.

The score for the Social Functioning Scale is calculated by simply adding up the individual scores for each of the twelve questions.

3.6 SECTION V: CRIMINALITY

The existence of a statistical relationship between heroin use and the commission of crimes has been documented in a large number of studies (e.g. Ball et al, 1980; Ball et al, 1983; Dobinson & Ward, 1985; Inciardi & Chambers, 1972). Levels of criminal activity among IDU have been related to periods of heroin use and periods of abstinence (e.g. Ball et al, 1980; Ball et al, 1983; Dobinson & Ward, 1985, 1986; McGlothlin et al, 1978; Nurco et al, 1981), and to level of heroin use within a period of regular use (e.g. Ball et al, 1980; Chaiken & Chaiken, 1982; Dobinson & Ward, 1985). The most common types of criminal behaviour IDU have been found to engage in are drug dealing, property crime, and fraud (e.g. Dobinson & Ward 1985, 1986).

The focus of the Criminality Scale is upon reported recent criminal activity. Data regarding the relationship between self-reported crime and official arrest statistics indicate a great deal of undetected criminal activity occurs in this population (e.g. Inciardi, 1979; Inciardi & Chambers, 1972). Clearly a measure sensitive to changes in the criminal behaviour of IDU cannot be based solely on the number of arrests and incarcerations of subjects.

The Criminality Scale attempts to assess the subject's involvement in recent criminal activity. The extent to which this is successful depends on a number factors. The subject will have to be guaranteed that any information given is completely confidential and this will have to be clearly understood by the subject. It should also be explained that the OTI does not ask specific details about specific crimes; it only asks about what kind of crime the subject has been involved in and how often it has occurred. To a great extent, the kind of rapport that has developed up until this point of the interview will determine how much the subject will be willing to reveal about any criminal activities.

The Criminality Scale is divided into four crime areas: property crime, dealing, fraud, and crimes involving violence. It is usually necessary to explain the kinds of activity that make up each crime area (see preamble to Criminality questions in the OTI). For each of the four crime areas, ask the subject to estimate how often they have committed the type of crime in question during the last month. The total score for the Criminality Scale is calculated by adding up the score for each of the four crime areas.

3.7 SECTION VI: HEALTH

The assessment of physical health is an essential component of treatment evaluation, given the medical morbidity associated with injecting drug use. Injecting drug use has been associated with liver disease, renal disease, pulmonary disease, sexually transmitted diseases, and cardiovascular disease (e.g. Ostor, 1977; Webster et al, 1977). Opiate treatment has been shown to result in general health improvements among IDU (e.g. McLellan et al, 1983).

The health scale is a symptom check-list that has been designed to give an indication of the subject's current state of health, especially in relation to those areas within which IDU usually develop problems. The scale is divided into items addressing symptoms and signs in each of the major organ systems. There is also a section specifically concerned with injection-related health problems.

Tell the subject that you are going to read out a list of common health problems, and you want them to say "yes" if they have had problems with the symptom in the last month. The interviewer reads out the list to the subject and ticks any of the symptoms that the subject has experienced in the previous month. In the case of gynaecological symptoms, enquires regarding the last few months. After doing that, add up the number of symptoms reported in each sub-section and enter the total at the end of the Health section. The score for the Health Scale is derived by adding up the totals for each sub-section. The higher the score, the poorer the overall health of the subject. For more information on the reliability and validity of the health scale, readers are referred to Darke et al (1991c).

3.8 SECTION VII: PSYCHOLOGICAL ADJUSTMENT

The existence of a relationship between opioid use and psychopathology is a robust finding of the literature (e.g. Corty et al, 1988; Darke & Ross, 1997; Khantzian & Treece, 1985; Swift et al, 1990; Woody et al 1983; Woody et al, 1987). For example, Rounsaville et al (1982) reported a current psychiatric disorder rate of 70.3 % (excluding substance dependence) amongst a sample of in-treatment opioid users, and a life-time prevalence of 86.9 %. Furthermore, there is substantial evidence that opioid treatment ameliorates the psychiatric symptoms of opioid users (e.g. McLellan et al, 1982; McLellan et al, 1986; Ward et al, 1998; Woody et al 1983, 1987).

The aim of this scale is to provide a global measure of current psychological adjustment. In order to obtain such a measure, the General Health Questionnaire-28 (GHQ-28), developed by Goldberg and Hillier (1979), was incorporated into the OTI. The GHQ-28 provides a global measure of non-psychotic psychopathology, and has excellent reliability and validity (Goldberg & Williams, 1988). It also provides four sub-scales in addition to the global score: (A) Somatic symptoms, (B) Anxiety, (C) Social Dysfunction, and (D) Depression. It has been our experience that IDU have no problems in completing this section themselves. A general introduction explaining the questionnaire is included immediately preceding the GHQ.

SCORING THE GHQ

For each response given in the two right hand columns to any question, score 1. Scores may thus range from 0-28. If you wish to determine the number of "cases" of psychopathology in your subject population, the most commonly used cut-off point is 4/5 (Goldberg & Williams, 1988). As noted before, the GHQ-28 provides 4 sub-totals in addition to the overall total. Enter each of the section totals in the boxes appearing under the sub-heading GHQ SUMMARY DATA as follows:

Questions 1-7:	**Box A (Somatic Symptoms)**
Questions 8-14:	**Box B (Anxiety)**
Questions 15-21:	**Box C (Social Dysfunction)**
Questions 22-28:	**Box D (Depression)**

To derive the total score for the GHQ, add up the score for each of the four sections.

3.9 OTI SCORESHEET

The OTI scoresheet is located on the last page instrument. It is designed to allow quick comparisons of initial and follow-up interviews for each outcome domain. Enter the total scores for each outcome domain in the boxes at the top of the sheet. The Q scores for each drug class are also included to enable detailed comparisons for consumption in each drug class.

4.0 PSYCHOMETRIC PROPERTIES OF THE OTI

The subjects interviewed in the development of the OTI were 290 opioid users. The sample included 230 subjects who were currently enrolled in a form of opiate treatment (methadone maintenance: 187, Narcotics Anonymous: 6, drug free counselling: 8), as well as 60 subjects not currently enrolled in treatment who had been recruited from needle exchanges. All subjects were volunteers who were paid A$20 for participation in the study. Subjects were recruited by means of signs advertising the project placed in the waiting rooms of the agencies involved in the study. The participating agencies included methadone maintenance units, drug advisory services, and needle exchanges in the inner, eastern, northern and western suburbs of Sydney. Subjects had a mean age of 29.7 years (SD 5.3; range 17-45), and a male to female ratio of approximately 2:1. The demographics of the sample are comparable with Australian (Morlet et al, 1990; Wolk et al, 1990) and international studies (Power et al, 1989; Skidmore et al, 1990).

As was noted above, all interviews conducted to test the reliability and validity of the OTI were conducted in a confidential, anonymous research setting. Subjects were assured that anything that they said in the interview was confidential, and would not be reported to the relevant treatment agency. Given this, the reliability and validity of the instrument in a clinical setting, where there may be consequences for the client in admitting to drug use etc., requires more research. It must again be emphasised that the problem of obtaining accurate information in a setting where there are consequences for the individual in admitting to certain behaviours is a problem for all assessment instruments. To a great degree, the accuracy of the information obtained will depend upon the relationship and rapport that exists between the agency and clients. Clearly, these problems will apply to some areas more than others. For example, drug use will probably be more problematic than health or social functioning.

The reliability and validity of the OTI scales were tested by a series of sub-studies.

(i) Reliability

Test-retest / Inter-rater reliability: **Fifty subjects were retested on the OTI a week after the initial interview. Half of the retest interviews were conducted by the interviewer who conducted the initial interview, and half by a different interviewer.**

Internal reliability: **Coefficient alpha (Cronbach, 1951) was calculated in order to ascertain the internal consistency of the individual scales.**

(ii) Validity

Correlations with the Addiction Severity Index: **One hundred subjects were administered the composite items from the ASI in addition to the OTI.**

Collateral interviews: **The sexual partners of 50 subjects were interviewed independently, and were paid A$10 for the interview. Participating sexual partners were questioned regarding the subject's recent behaviour in the outcome domains of drug use, HIV risk-taking behaviour, social functioning, and criminality.**

Health scale medical examinations: **To further test the validity of the health scale, 43 subjects were given a full medical examination by two qualified physicians, followed by an independent administration of the OTI.**

Urinalysis results: **The urinalysis results of 50 subjects for the month preceding interview were compared to their self-reported drug use over that period. The urinalyses were conducted at Oliver Latham Laboratories using Thin Layer Chromatography. Drug classes tested for at this laboratory are opioids, amphetamines, cocaine, tranquillizers, and barbiturates.**

Criminal records: **To further test the validity of the criminality scale, the conviction records of 37 subjects were compared to their self-reported convictions.**

RESULTS

(i) Reliability

Test-retest reliability

Subjects who were retested on the OTI a week after their initial interview had a mean age of 31.4 years (SD 5.5; range 20-42), and 60% were male. Forty eight of the subjects were in methadone treatment, and two were non-treatment subjects. Pearson product-moment correlation coefficients were calculated between the total scores on the OTI scales obtained from subjects at the two interviews. The obtained correlation coefficients are presented in Table 1.

Table 1
Test-retest reliability of OTI scales

Scale	All Subjects (N=50)	Same Interviewer (N=25)	Different Interviewer (N=25)
Poly-drug Use	**0.88**	**0.92**	**0.81**
HIV Risk-taking Behaviour	**0.86**	**0.87**	**0.85**
Social Functioning	**0.88**	**0.89**	**0.85**
Criminality	**0.96**	**0.86**	**0.99**
Health	**0.86**	**0.86**	**0.86**
Psychiatric Status (GHQ)	**0.88**	**0.78**	**0.93**

Internal reliability

Coefficient alpha for each of the scales to date are as follows: HIV Risk-taking Behaviour: 0.70; Social Functioning: 0.58; Criminality: 0.38; Health: 0.76; Psychological Adjustment (GHQ): 0.83; Poly-drug Use: Coefficient alpha was not calculated, as it was not considered appropriate to combine the drug use data into a single scale score. The provision of use data for each category and a poly drug use total are considered to be the appropriate means of presenting this domain.

(ii) Validity

Correlations with the Addiction Severity Index

Subjects administered both the ASI and the OTI had a mean age of 30.4 years (SD 5.0; range 18-45), and 60% were male. The correlations between the OTI scale and the relevant ASI scales are presented in Table 2.

Table 2
Correlations of OTI and ASI scales (N=100)

Scale	Correlation
OTI Alcohol / ASI Alcohol	0.70
GHQ / ASI Psychiatric	0.70
OTI Health / ASI Medical	0.57
OTI Crime / ASI Crime Days	0.54
OTI Poly-drug / ASI Drug	0.43
OTI Social / ASI Social	0.42
OTI Crime / ASI Legal	0.02

With the exception of the legal section, the correlations with the ASI are all significant (p<.005). However, the ASI legal section is primarily oriented towards convictions, whereas the OTI crime section is oriented towards reported recent criminal behaviour. When the ASI question on number of crime days in the last month is correlated with the OTI crime scale the correlation is 0.54 (p<.005). It should be noted that the OTI crime scale detected 29% of subjects as having committed some crime in the preceding month, whereas the less detailed ASI, answered by the same subjects, detected only 19%.

Collateral Validation

Subjects whose sexual partners were interviewed had a mean age of 30.2 years (SD 5.4; range 20-42), and 52% were male. All of the subjects whose sexual partners were contacted were in methadone treatment. Percentage agreement between the responses of subjects and their collaterals on the recent behaviour of subjects are presented in Table 3. Agreement was defined as concordance on any occurrence of the behaviour referred to in an item.

Table 3
Agreement between subjects' self-report and collateral report

Section I: Drugs

	% Agreement		% Agreement
Heroin	92	Tranquillizers	90
Other Opiates	92	Barbiturates	100
Alcohol	88	Hallucinogens	90
Cannabis	82	Inhalants	100
Amphetamines	96	Tobacco	100

Section II: Injecting and Sexual Practices

	% Agreement
No. of hits	94
Shared after other	86
How many shared before self	88
Passed on used needle to other	86
Cleaned before re-use	88
Cleaned with bleach	76
Number of sexual partners	96
Used condom with partner	90
Paid sex	100
Anal sex	100

Section III: Social

	% Agreement
No. of houses lived in	94
How much time unemployed	88
Had conflict with partner	88
Lived with heroin user	96
Hangs around with heroin users	86

Section IV: Crime

	% Agreement
Property Crime	76
Dealing	84
Fraud	90
Violent Crime	94
Past Convictions	88
Current Charges	94

Health Scale Medical Examinations

The mean age of subjects participating in the health validation study was 28.9 (SD 5.0),

and 80% were male. The mean Health Scale total of these subjects was 12.6 (SD 8.6), range 0-31, which is virtually identical to that of the sample as a whole: 12.5 (SD 7.3), range 0-42. The correlation between the health scale totals and the number of signs and symptoms detected in the independent medical examination was 0.84 ($p<.005$). The correlation between the health scale totals and the global health rating made by the physicians was 0.69 ($p<.005$).

Urinalysis Results

The mean age of subjects was 30.5 (SD 5.5), and 54% were male. All subjects were currently in methadone treatment. The overall agreement between self-report and urinalysis results for all drug classes tested was 88.7%. Agreement for individual drug classes is presented in Table 4. It should be noted that, of the instances where discrepancies existed between self-report and urinalysis results, 73.5% involved reported self use not being detected in the urinalysis results. Thus, overall, in only 3% of instances was use denied but detected by urinalysis.

Table 4
Agreement between subjects' self-report and urinalysis results(N = 50)

Drug Class	% Agreement
Heroin	86
Other Opiates	96
Amphetamines	88
Cocaine	90
Tranquillizers	74
Barbiturates	98
All Classes	89

Criminal records

The mean age of these subjects was 30.4 (SD 4.1). Of these subjects, 35.1% reported having had committed a crime in the preceding month. This is comparable to the 29% of subjects in the entire sample who reported having committed a crime in the month preceding interview. It should also be noted that 79.4% of these subjects reported having had criminal convictions. The overall agreement between self-reported convictions and conviction records was 82.4%. Agreement was defined as concordance between the presence or absence of convictions in each crime area. Specifically, the

agreement for the four crime areas was as follows.

Property crime convictions: 78.4%; Drug convictions: 78.4%; Fraud convictions: 83.8%; Violent crime convictions: 89.2%.

(iii) Structure of the OTI

A principal components analysis with varimax rotation was conducted on the results of 205 complete OTI's. The results are presented in Table 5. As can be seen, two factors emerged from the analysis. Factor I may be conceptualised as "drug using life-style" (32.56% of the variance).

The drug use, HIV risk-taking, criminality, and social functioning scales loaded upon this factor. Factor II may be described as "health and well-being" (26.55%), comprising the health scale and the GHQ. The two rotated factors accounted for 59.11% of the variance.

Table 5
Factor structure of the OTI

	Factor 1	**Factor 2**
HIV Risk-taking	**0.81**	**-0.09**
Drug use	**0.76**	**0.11**
Criminality	**0.63**	**0.14**
Social Functioning	**0.54**	**0.29**
Health	**0.10**	**0.86**
GHQ	**0.11**	**0.85**
Eigen values (sums of latent roots)	**1.95**	**1.59**

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Appendix 1: Distributions of OTI Scale Scores

Figure 1: Distribution of Polydrug Use Scores

(N= 290)

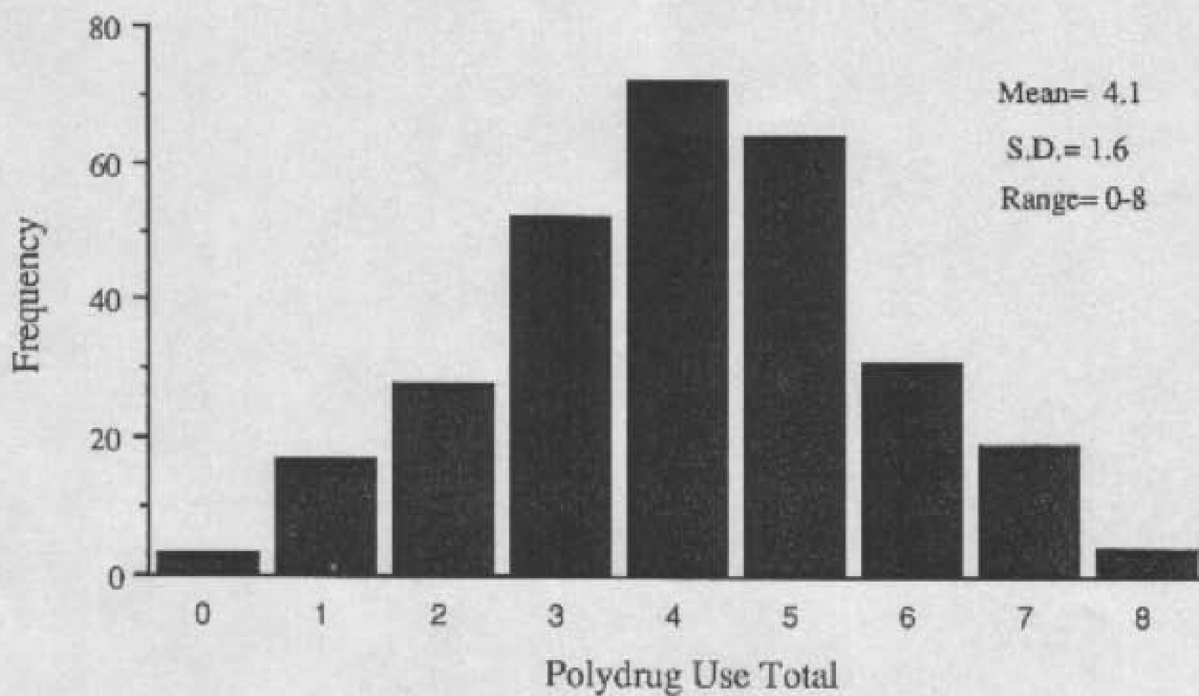


Figure 2: Distribution of HRBS Scores

(N= 290)

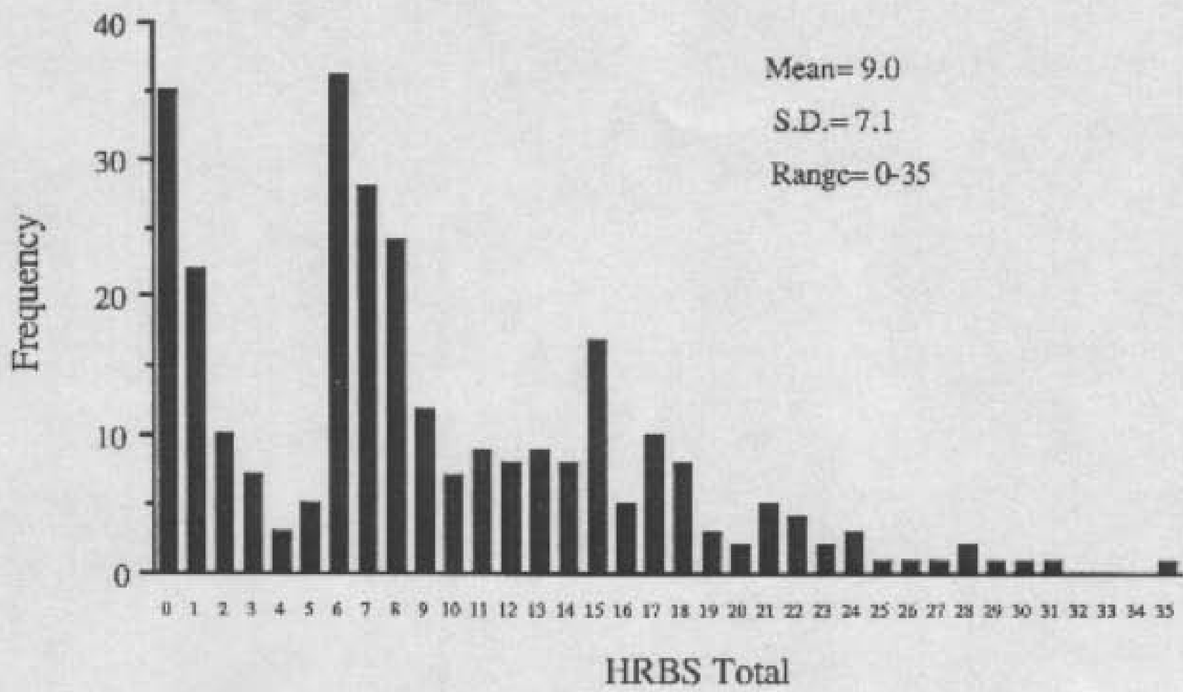


Figure 3: Distribution of Social Functioning Scores

(N= 254)

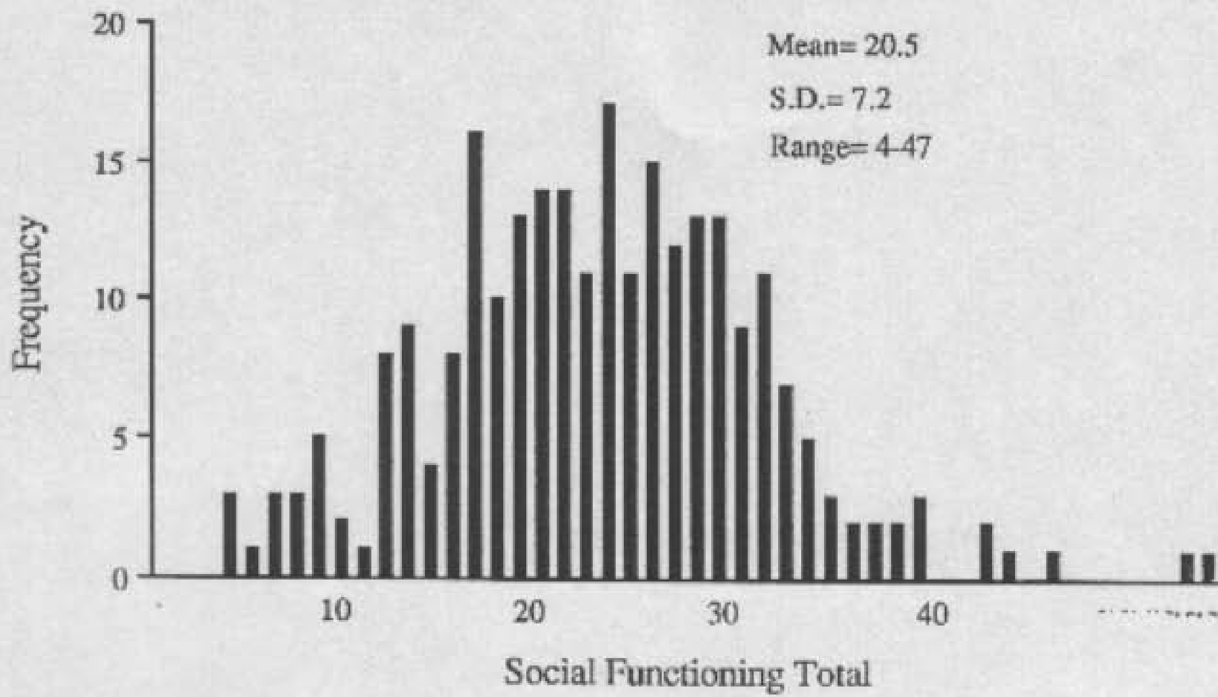


Figure 4: Distribution of Criminality Scale Scores

(N= 275)

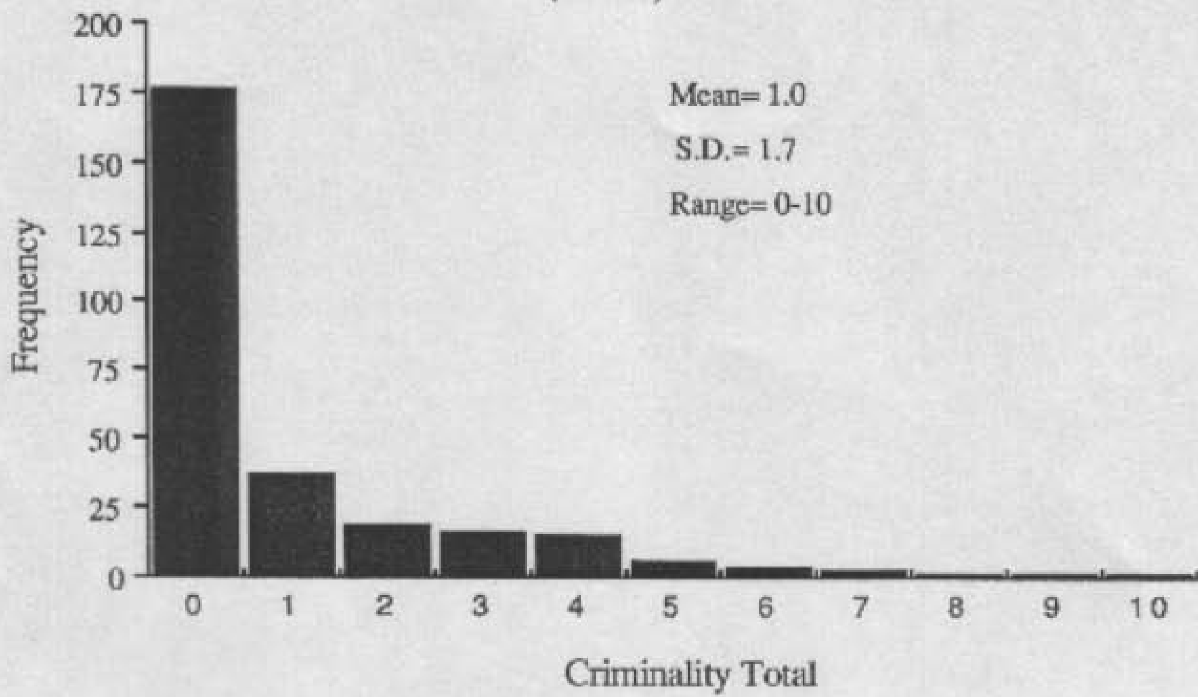


Figure 5: Distribution of Health Scale Scores

(N= 218)

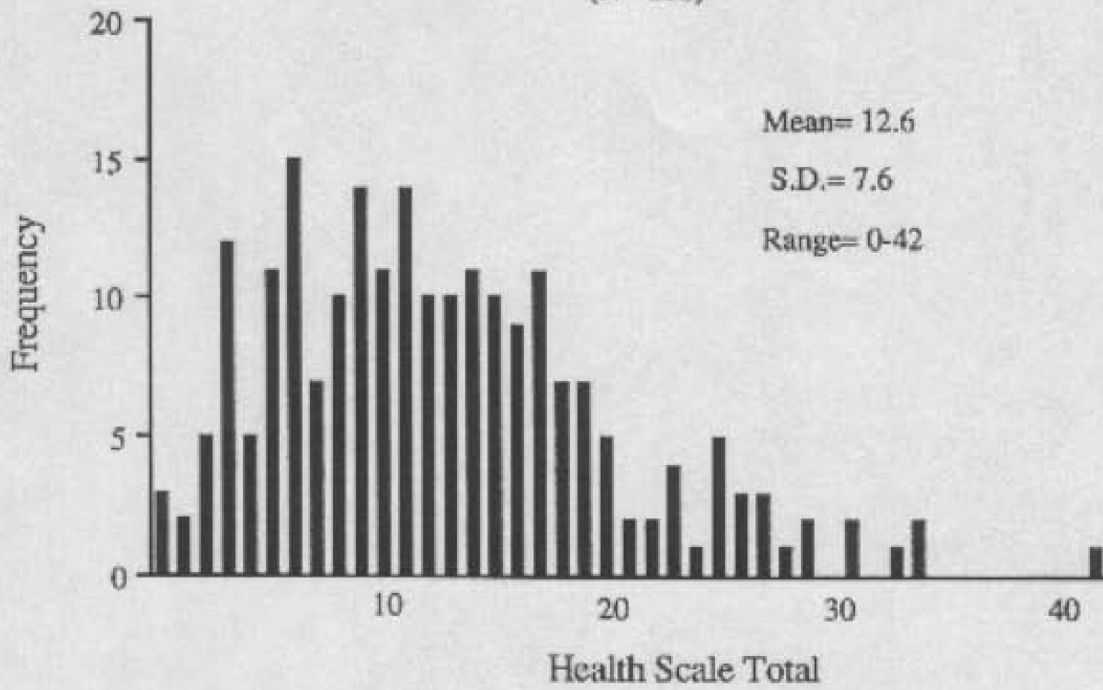
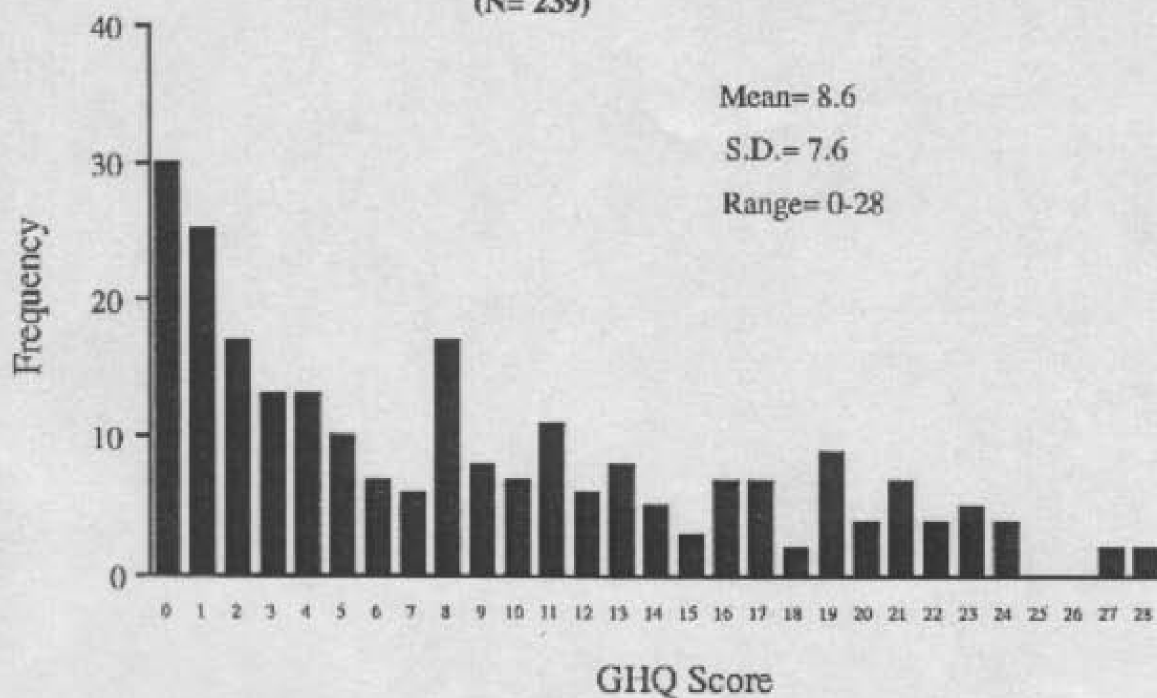


Figure 6: Distribution of GHQ Scores

(N= 239)



Appendix 2: The Opiate Treatment Index

Study No.________________

Centre No.________________

Date of Interview___________

Interviewer________________

Interview ________________

OPIATE TREATMENT INDEX

(OTI)

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SECTION I: DEMOGRAPHICS/TREATMENT HISTORY

1. Sex:

Male 1
Female 0

2. Age ______yrs

3. How many years of school did you complete? _______yrs

4. Have you completed any courses after school?

No courses 1
Yes, trade/technical......................... 2
Yes, university/college..................... 3

6. How are you employed at the moment?

Not employed 1
Full time 2
Part time/casual............................... 3
Student 4
Home duties 5

7. What is the <u>main</u> type of drug treatment you are currently in?

Not in treatment 0
Methadone .... 1 (Dose _______mg)
Detoxification................................... 2
Therapeutic community 3
Narcotics Anonymous 4
Drug counselling.............................. 5

8. How long have you been in your current treatment?_______ mths

9. Have you been in any types of treatment in the past?

Yes 1
No 0

10. Have you ever been in prison?

Yes 1
No 0

SECTION II: DRUG USE

First, I'm going to ask you some questions on your use of drugs. I'll emphasise again that the information you give me is completely confidential.

NB: *For all categories, if the subject responds that their last use of the drug was more than a month ago, score zero for that category. Do not include use on day of interview.*

Heroin

Now I'm going to ask you some questions about heroin (smack, hammer, horse, scag).

1. On what day did you last use heroin? _________

2. How many hits/smokes/snorts did you have on that day? ______

3. On which day before that did you use heroin? _______

4. And how many hits/smokes did you have on that day? _______

5. And when was the day before that? _______
   (q1= ,q2= ,t1= ,t2=) Q

□

Other Opiates

These questions are about your use of opiates other than heroin (e.g. street methadone/done, morphine, pethidine, codeine).

6. On what day did you last use opiates other than heroin? (do not include legally obtained methadone) _______

7. How many pills, doses etc. did you have on that day? ______

8. On which day before that did you use opiates other than heroin? _______

9. And how many pills, doses etc. did you have on that day? _______

10. And when was the day before that? _______

    (q1= ,q2= ,t1= ,t2=) Q

□

Alcohol

These questions are about your use of alcohol.

11. On what day did you last drink alcohol? __________

12. How much alcohol did you drink on that day? ________

	Wine	**Spirits**	**Beer**	**Fortified Wine**
	Wine Gl.	Nips (30ml)	Middies (285ml)	Port Gl.
	Bottles (750ml)	Doubles	Schooners (425ml)	Bottles
	Flagons	Bottles (750ml)	Cans/ Stubbies (375ml)	Flagons
	Casks (___ lit.)		Bottles (750ml)	
NO. STAND. DRINKS				

TOTAL STANDARD DRINKS ____

13. On which day before that did you drink alcohol? _____

14. And how much did you drink on that day? ________

	Wine	**Spirits**	**Beer**	**Fortified Wine**
	Wine Gl. (120ml)	Nips (30ml)	Middies (285ml)	Port Gl. (60ml)
	Bottles (750ml)	Doubles	Schooners (425ml)	Bottles (750ml)
	Flagons (1.5lit.)	Bottles (750ml)	Cans/ Stubbies (375ml)	Flagons (1.5lit.)
	Casks (___ lit.)		Bottles (750ml)	
NO. STAND.				

DRINKS				

TOTAL STANDARD DRINKS ____

15. And when was the day before that? _______

(q1= ,q2= ,t1= ,t2=) Q

Cannabis

These questions are about your use of marijuana (dope, grass, hash, pot).

16. On what day did you last use marijuana ? ________

17. How many joints, bongs, etc. did you have on that day? _________

18. On which day before that did you use marijuana? _______

19. And how many joints, bongs, etc. did you have on that day? _______

20. And when was the day before that? _______

(q1= ,q2= ,t1= ,t2=) Q

Amphetamines

These questions are about your use of amphetamines (speed).

21. On what day did you last use amphetamines? _________

22. How many tablets, snorts, hits etc. did you have on that day? ______

23. On which day before that did you use amphetamines? _______

24. And how many tablets, snorts, hits, etc., did you have on that day? _______

25. And when was the day before that? _______

(q1= ,q2= ,t1= ,t2=) Q

Cocaine

These questions are about your use of cocaine (coke, snow, crack).

26. On what day did you last use cocaine? _________

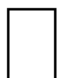
27. How many snorts, hits, smokes etc. did you have on that day? _________

28. On which day before that did you use cocaine? _______

29. And how many snorts, hits, smokes etc. did you have on that day? _______

30. And when was the day before that? _______

(q1= ,q2= ,t1= ,t2=)   Q



Tranquillisers

These questions are about your use of tranquillisers (e.g. Serepax, Rohypnol, Mogadon, Valium).

31. On what day did you last use tranquillisers? _________
32. How many pills did you have on that day? _________
33. On which day before that did you use tranquillisers? _______
34. And how many pills did you have on that day? _______
35. And when was the day before that? _______

(q1= ,q2= ,t1= ,t2=) Q ☐

Barbiturates

These questions are about your use of barbiturates (e.g. Nembutal, Seconal).

36. On what day did you last use barbiturates? _________
37. How many pills did you have on that day? _________
38. On which day before that did you use barbiturates? _______
39. And how many pills did you have on that day? _______
40. And when was the day before that? _______

(q1= ,q2= ,t1= ,t2=) Q ☐

Hallucinogens

These questions are about your use of hallucinogens (e.g. LSD/acid, ecstasy, magic magic mushrooms).

41. On what day did you last use hallucinogens? _________
42. How many tabs, pills, etc. did you have on that day? _________
43. On which day before that did you use hallucinogens? _______
44. And how many tabs, pills, etc. did you have on that day? _______
45. And when was the day before that? _______

(q1= ,q2= ,t1= ,t2=) Q ☐

Inhalants

These questions are about your use of inhalants (e.g. amyl nitrite/rush, glue, laughing gas, aerosols, petrol).

46. On what day did you last use inhalants? __________
(do not include asthma sprays)

47. How many sniffs did you have on that day? __________

48. On which day before that did you use inhalants? ________

49. And how many sniffs did you have on that day? ________

50. And when was the day before that? ________

(q1= ,q2= ,t1= ,t2=) Q

Tobacco

Finally, these questions are about your use of cigarettes.

51. On what day did you last use tobacco? __________

52. How many cigarettes did you have on that day? __________

53. On which day before that did you use tobacco? ________

54. And how many cigarettes did you have on that day? ________

55. And when was the day before that? ________

(q1= ,q2= ,t1= ,t2=) Q

General Comments On Drug Use

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DRUG USE SUMMARY

Heroin Use Total	
Poly-drug Use Total	

POLY-DRUG USE

Other Opiates		Tranquillisers	
Alcohol		Barbiturates	
Cannabis		Hallucinogens	
Amphetamines		Inhalants	
Cocaine		Tobacco	

SECTION III: INJECTING AND SEXUAL PRACTICES

These questions are about the way you use drugs, and your recent sexual behaviour. I emphasise again that any information that you give me is completely confidential.

DRUG USE

1. How many times have you hit up (i.e. injected any drugs) in the last month?

Hasn't hit up 0
Once a week or less............................1
More than once a week 2
(but less than once a day)
Once a day 3
2-3 times a day 4
More than 3 times a day.....................5

If subject hasn't injected in the last month, score zero for the Drug Use section, and go to question 7.

2. How many times in the last month have you used a needle after someone else ..had already used it?

No times...... 0
One time...... 1
Two times.... 2
3-5 times...... 3
6-10 times.... 4
More than 10 times 5

3. How many different people have used a needle before you in the last month?

None........... 0
One person 1
Two people.. 2
3-5 people.... 3
6-10 people.. 4
More than 10 people 5

4. How many times in the last month has someone used a needle after you have used it?

No times...... 0
One time...... 1
Two times.... 2
3-5 times...... 3
6-10 times.... 4
More than 10 times 5

5. How often, in the last month, have you cleaned needles before re-using them ?

Doesn't re-use....................................0
Every time... 1
Often 2
Sometimes... 3
Rarely......... 4
Never.......... 5

6. Before using needles again, how often in the last month did you use bleach to clean them?

Doesn't re-use....................................0
Every time... 1
Often 2
Sometimes... 3
Rarely......... 4
Never.......... 5

Drug Use Sub-total

SEXUAL BEHAVIOUR

7. How many people, including clients, have you had sex with in the last month?

None........... 0
One person 1
Two people.. 2
3-5 people.... 3
6-10 people.. 4
More than 10 people 5

If no sex in the last month, score zero for Sexual Behaviour section, and go to Section IV.

8. How often have you used condoms when having sex with your regular partner(s) in the last month?

No reg. partner/No penetrative sex 0
Every time... 1
Often 2
Sometimes... 3
Rarely......... 4
Never.......... 5

9. How often did you use condoms when you had sex with casual partners in the ..last month?

No cas. partners/No penetrative sex...0
Every time... 1
Often 2
Sometimes... 3
Rarely.......... 4
Never.......... 5

10. How often have you used condoms when you have been paid for sex in the last month?

No paid sex/No penetrative sex 0
Every time... 1
Often 2
Sometimes... 3
Rarely.......... 4
Never.......... 5

11. How many times did you have anal sex in the last month?

No times...... 0
One time...... 1
Two times.... 2
3-5 times...... 3
6-10 times.... 4
More than 10 times 5

Sexual Behaviour Sub-total ☐

TOTAL SCORE ☐

(Drug Use Sub-total + Sexual Behaviour Sub-total)

General Comments on HIV Risk-taking Behaviour

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SECTION IV: SOCIAL FUNCTIONING

These next few questions concern the social aspects of your life (things like jobs, friends, etc).

1. How many different places have you lived in over the last six months?

One 0
Two..............................1
Three............................2
Four 3
Five or more 4

2. How much of the last six months have you been unemployed?

All of the time 4
Most of the time 3
Half of the time 2
Some of the time 1
None of the time...........0

3. How many different full-time jobs have you had in the last six months?

One 0
Two..............................1
Three............................2
Four or more.................3
None 4

4. How often in the last six months have you had conflict with your relatives?

Very often....................4
Often............................3
Sometimes 2
Rarely 1
Never 0
N/A

5. How often in the last six months have you had conflict with your partner(s)?

Very often....................4
Often............................3
Sometimes 2
Rarely 1
Never 0
N/A

6. How often in the last six months have you had conflict with your friends?

Very often....................4
Often............................3
Sometimes 2
Rarely 1
Never 0
N/A

7. About how many close friends would you estimate that you have? (INCLUDE PARTNER)

None 4
One 3
Two..............................2
Three............................1
Four or more................0

8. When you are having problems, are you satisfied with the support you get from your friends?

Very satisfied...............0
Satisfied.......................1
Reasonably OK 2
Not satisfied.................3
Very unsatisfied...........4
N/A

9. About how often do you see your friends?

Very often....................0
Often............................1
Sometimes 2
Rarely 3
Never 4
N/A

10. How many of the people you hang around with now have you known for more than six months?

None 4
Less than half 3
About a half.................2
More than half 1
All of them 0
N/A

11. How much of the last six months have you been living with anyone who uses heroin?

All of the time 4
Most of the time 3
Half of the time 2
Some of the time 1
None of the time...........0

12. How many of the people you hang around with now are users? (INCLUDE PARTNER)

None 0
Less than half 1
About a half..................2
More than half..............3
All of them 4

SOCIAL TOTAL ☐

General Comments on Social Functioning

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SECTION V: CRIME

In this section I am interested in any crimes that you may have committed. Any information that you give here is completely confidential.

Property Crime

First, I am going to ask you some questions on property crime. By property crime I mean things such as break and enter, robbery without violence, shoplifting, stealing a prescription pad, stealing a car, or receiving stolen goods. I am interested in the number of times that you committed a property crime, not the number of times you've been caught.

1. How often, on average, during the last month have you committed a property crime? (READ OPTIONS)

No property crime 0
Less than once a week............................1
Once a week 2
More than once a week...........................3
(but less than daily)
Daily..4

Dealing

Now I am going to ask you some questions about dealing. By dealing I mean selling drugs to someone. I am interested in the number of times that you've dealt drugs, not the number of times you've been caught.

2. How often, on average, during the last month have you sold drugs to someone?

No drug dealing.....................................0
Less than once a week............................1
Once a week 2
More than once a week...........................3
(but less than daily)
Daily..4

Fraud

Now I am going to ask you some questions about fraud scams. By fraud I mean things such as forging cheques, forging prescriptions, social security scams, or using someone else's credit card. I am interested in the number of times that you've committed fraud, not the number of times that you've been caught.

3. How often, on average, during the last month have you committed a fraud?

No fraud..0
Less than once a week............................1
Once a week 2
More than once a week............................3
(but less than daily)
Daily 4

Crimes Involving Violence

Finally, I am going to ask you some questions about crimes involving violence. By crimes involving violence I mean things such as using violence in a robbery, armed robbery, assault, rape, etc. I am interested in the number of times that you've committed a crime involving violence, not the number of times that you've been caught.

4. How often, on average, during the last month have you committed a crime involving violence?

No violent crime.....................................0
Less than once a week............................1
Once a week 2
More than once a week............................3
(but less than daily)
Daily 4

CRIME TOTAL ________

General Comments on Crime

____

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SECTION VI: HEALTH

These questions are about your health. I am going to read out a list of health problems. Please answer `Yes' if you have had any of these problems over the last month.

General

fatigue/energy loss	
poor appetite	
weight loss/underweight	
trouble sleeping	
fever	
night sweats	
swollen glands	
jaundice	
bleeding easily	
teeth problems	
eye/vision problems	
ear/hearing problems	
cuts needing stitches	
TOTAL	

Injection Related Problems

overdose	
abscesses/infections from injecting	
dirty hit (made feel sick)	
prominent scarring/bruising	
difficulty injecting	
TOTAL	

Cardio/Respiratory

persistent cough	
coughing up phlegm	
coughing up blood	
wheezing	
sore throat	
shortness of breath	
chest pains	
heart flutters/racing	
swollen ankles	
TOTAL	

Genito-urinary

painful urination	
loss of sex urge	
discharge from penis/vagina	
rash on/around penis/vagina	
TOTAL	

Gynaecological
(WOMEN ONLY) (in the last few months)

irregular period	
miscarriage	
TOTAL	

Musculo-skeletal

Joint pains/stiffness	
Broken bones	
Muscle pain	

TOTAL	

Neurological

headaches	
blackouts	
tremors (shakes)	
numbness/tingling	
dizziness	
fits/seizures	
difficulty walking	
head injury	
forgetting things	
TOTAL	

Gastro-intestinal

nausea	
vomiting	
stomach pains	
constipation	
diarrhoea	
TOTAL	

HEALTH TOTAL

General Comments on Health

____

____

____

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SECTION VII: PSYCHOLOGICAL ADJUSTMENT

GENERAL HEALTH QUESTIONNAIRE

Please read this carefully:

I should like to know if you have had any medical complaints, and how your health has been in general over the past few weeks. Please answer ALL the questions on the following pages simply by circling the answer that you think most nearly applies to you. Remember that we want to know about present and recent complaints, not those that you had in the past.

HAVE YOU RECENTLY:

1. Been feeling well and in good health?	Better than usual	Same as usual	Worse than usual	Much worse than usual
2. Been feeling in need of a pick me up?	Not at all	No more than usual	Rather more than usual	Much more than usual
3. Been feeling run down and out of sorts?	Not at all	No more than usual	Rather more than usual	Much more than usual
4. Felt that you are ill?	Not at all	No more than usual	Rather more than usual	Much more than usual
5. Been getting any pains in your head?	Not at all	No more than usual	Rather more than usual	Much more than usual
6. Been getting a feeling of tightness or pressure in your head?	Not at all	No more than usual	Rather more than usual	Much more than usual
7. Been having hot or cold spells?	Not at all	No more than usual	Rather more than usual	Much more than usual
8. Lost much sleep over worry?	Not at all	No more than usual	Rather more than usual	Much more than usual
9. Had difficulty in staying asleep once you are off?	Not at all	No more than usual	Rather more than usual	Much more than usual
10. Felt constantly under strain?	Not at all	No more than usual	Rather more than usual	Much more than usual
11. Been getting edgy and bad tempered?	Not at all	No more than usual	Rather more than usual	Much more than usual
12. Been getting scared or panicky for no good reason?	Not at all	No more than usual	Rather more than usual	Much more than usual

13. Found everything getting on top of you?	Not at all	No more than usual	Rather more than usual	Much more than usual
14. Been feeling nervous and strung up all the time?	Not at all	No more than usual	Rather more than usual	Much more than usual
15. Been managing to keep busy and occupied?	More so than usual	Same as usual	Rather less than usual	Much less than usual
16. Been taking longer over the things you do?	Quicker than usual	Same as usual	Longer than usual	Much longer than usual
17. Felt on the whole you were doing things well?	Better than usual	About the same	Less well than usual	Much less well
18. Been satisfied with the way you've carried out your task?	More satisfied	About the same	Less than usual	Much less satisfied
19. Felt that you are playing a useful part in things?	More so than usual	Same as usual	Less useful than usual	Much less useful
20. Felt capable of making decisions about things?	More so than usual	Same as usual	Less so than usual	Much less capable
21. Been able to enjoy your normal day to day activities?	More so than usual	Same as usual	Less so than usual	Much less than usual
22. Been thinking of yourself as a worthless person?	Not at all	No more than usual	Rather more than usual	Much more than usual
23. Felt that life is entirely hopeless?	Not at all	No more than usual	Rather more than usual	Much more than usual
24. Felt that life is not worth living?	Not at all	No more than usual	Rather more than usual	Much more than usual
25. Thought of the possibility that you might do away with yourself?	Definitely not	I don't think so	Has crossed my mind	Definitely have

26. Found at times that you couldn't do anything because your nerves were so bad?	Not at all	No more than usual	Rather more than usual	Much more than usual
27. Found yourself wishing you were dead and away from it all?	Not at all	No more than usual	Rather more than usual	Much more than usual
28. Found that the idea of taking your own life kept coming into your mind?	Definitely not	I don't think so	Has crossed my mind	Definitely has

GHQ SUMMARY DATA

A	B	C	D	TOTAL

General Comments on Health

____

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____

____

OPIATE TREATMENT INDEX
SCORESHEET

SCALES

	Drug use (Poly)	**HIV risk**	**Social**	**Crime**	**Health**	**GHQ**
Initial						
F/up 1						
F/Up2						

DRUG USE SCORES

	Initial	**F/Up 1**	**F/Up 2**
Heroin			
Other opiates			
Alcohol			
Cannabis			
Amphetamines			
Cocaine			
Tranquillizers			
Barbiturates			
Hallucinogens			
Inhalants			
Tobacco			