

HEALING THE DRAGON HEROIN USE DISORDER INTERVENTION

by

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*He is no hero who never met the dragon,
or who, if he once saw it, declared afterwards that he saw nothing.
Equally, only once one who has risked the fight with the dragon and is not overcome by it
wins the hoard, the 'treasure hard to attain'.
He alone has a genuine claim to self-confidence,
for he has faced the dark ground of his self
and thereby has gained...
an inner certainty which makes him capable of self-reliance.*

Carl Gustav Jung



I declare that

HEALING THE DRAGON: HEROIN USE DISORDER INTERVENTION

is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete reference.

Ms MMLF dos Santos

Date

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HEALING THE DRAGON: HEROIN USE DISORDER INTERVENTION

KEY TERMS

Heroin, heroin use disorder, heroin dependence, recovery, intervention, South African context.

SUMMARY

The history of heroin use disorder intervention has been characterised by fads and fashions. Some of the treatments that have been used have been, at best ineffective, and at worst harmful, and occasionally even dangerous. It is a sad reflection upon the field that practices and procedures for the treatment of heroin use disorders can so easily be introduced and applied without (or even contrary to) evidence. In South Africa, the field of heroin use disorder intervention has been 'in transition' since the outbreak of the heroin epidemic. Yet despite growing evidence of an association between heroin dependents use of supplementary intervention services (such as psychosocial and pharmacological/medical care) and intervention outcomes, and the fact that international emerging standards for substance use disorder intervention have called upon treatment intervention providers to enhance traditional substance use disorder services with services that address clients' psychological and social needs, heroin use disorder intervention programmes in South Africa generally fail to meet these research-based intervention standards. Much of what is currently delivered as intervention is based upon current best guesses of how to combine some science-based (for example, cognitive-behavioural therapy and pharmacotherapies) and self-help (12-step programmes) approaches into optimal intervention protocols. As progression is made in the twenty-first century, scientific information is now beginning to be used to guide the evolution and delivery of heroin use disorder care internationally. Regrettably, a scarcity of heroin use disorder intervention research is noted in South Africa. The present study delved into the insights of ten heroin use disorder specialists, and synthesised the findings with the results of a previous study undertaken by the author relating to forty long-term voluntarily abstinent heroin dependents. In terms of theory and practice, findings of the study suggest that the field is less in transition now than it was in 1995. It is an imperative that law-enforcement action be followed by an integrated programme of psychological, social and pharmacological outreach. These programmes will have to be expanded to address new demands and will need to include specialised skills training. Many interventions and procedures have begun to be integrated routinely into clinical practice.

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CHAPTER ONE

INTRODUCTION

1.1 BACKGROUND

The heroin trade is booming in South Africa. While the kingpins, who head more than a hundred drug syndicates in Johannesburg, live in luxury homes, their empires flourish in suburbs like Yeoville, Hillbrow, and Berea. Vast arrests by the elite Scorpions crime-fighting unit may have left the streets starved of hashish (cannabis resin), but heroin is available everywhere (Huisman, 2006; *The Star*, 2006; Leggett, 2002a; Leggett, 2002b; Leggett, 2001). While the substances added to heroin increase, the intensity of the 'high' and its effects are deadly (Gossop, 2000). No official statistics for the number of heroin overdoses in the country are available, but one Pretoria hospital alone treats 10 to 25 cases each month (*The Star*, 2006). According to the United Nations, South Africa's demand for heroin treatment has multiplied three-fold since 2004 (*United Nations Office for Drugs & Crime*, 2006). Heroin is just as easily accessible in schools as on the streets. In Gauteng and Pretoria alone, hundreds of heroin dependents - some as young as nine - are dying of overdoses every month. Desperate schoolchildren, prepared to do anything for their next 'hit', are forming criminal heroin 'clubs' to beg or steal money for their dependence (*The Star*, 2006; Smillie, 2000). Some schoolchildren are forced into sex work in order to finance their habit (Hosken, 2005). Heroin is also being used across racial lines with a growing number of youth in townships becoming dependent on the drug. Pretoria police have raised alarm bells about 'nyaope' (heroin) that is ravaging the township youth (*The Star*, 2006; Parry, Plüddemann & Myers, 2005; Hosken, 2005). Over two hundred pupils at a township school in Atteridgeville, most of whom are in their final year of schooling, recently admitted to being hooked on the drug (*Record East*, 2008). Most youth from these disadvantaged areas are less likely to afford residential rehabilitation and many are unaware of the dangers of the drug (Dos Santos & Van Staden, 2008; Friedman, 2002; Smetherham, 2002).

The street price of heroin is currently between R30 and R50 a gram - less than a tenth of its price five years ago and half the price of a bank bag of good-quality cannabis. The heroin upsurge in South Africa is addressed in the annual 2006 UNODC report on Global Illicit Drug Trends (*United Nations Office for Drugs & Crime*, 2006). The United Nations attributes the boom to 'spill over' from Southern Africa's increasing role in international drug trafficking. Narcotics experts believe the local drug market is being deliberately flooded to encourage dependence amongst the youth. One 'fix' is often enough to trap a child into eventual dependence, with withdrawal symptoms including skin sores, excruciating muscle and bone pain, vomiting and insomnia. Cheap street heroin is being concocted from 20% - 30% 'Thai white' - which is about 90% pure - and diluting substances as toxic as rat poison. Dangerous mixtures of heroin and Rattex, teething powder and bicarbonate of soda have reached epidemic proportions in KwaZulu-Natal and Cape Town (*The Star*, 2006).

The growing number of intravenous drug use (IDU) in Africa also has the potential to provide a significant contribution to the spread of HIV/AIDS on the continent, arising within the context of an established and growing HIV/AIDS epidemic. IDU has become the primary mode of HIV transmission in certain regions of North Africa, Asia, the Middle East and South America (Ball, 1999). This is a concern given that the efficiency of HIV transmission per injection is six times higher than for heterosexual acts

(United Nations Office on Drugs and Crime, 2005). IDU-driven epidemics tend to spread much more rapidly than those driven by sexual transmission (United Nations Office on Drugs and Crime, 2005), the prevalence of HIV/AIDS among IDUs can reach more than 50% of a given population, sometimes up to 90% within a very short periods of time. Such rapid transmission has been observed in both industrialised and developing countries (Des Jarlais, 1999). Sub-Saharan Africa contains only 10% of the world's inhabitants, yet is home to more than 60% of the global HIV-infected population (UNAIDS, 2005). Although the AIDS epidemic in sub-Saharan Africa is currently driven by heterosexual transmission, there are indications that both IDU and non-IDU are becoming increasingly important modes of transmission in certain sub-Saharan African countries as the problem continues to grow (Needle, Ball, Des Jarlais, Whitmore & Lambert; 2000; Adelekan & Stimson, 1997). However, there is little information on IDU in Africa not only because it is a relatively new phenomenon in this region, but also because many African countries simply lack the funds required to monitor drug use trends in a systematic manner (Affinnih, 2002). Of particular relevance is the increasing use of heroin throughout Africa (United Nations Office on Drugs and Crime, 2007; International Narcotics Control Board, 2004; Adelekan & Stimson, 1997). While other drugs are commonly injected among some population, heroin is the drug that is perhaps most widely injected around the world (McCurdy, Williams, Kilonzo, Ross & Leshabari, 2005). Because the use of opiates is not indigenous to Africa, the diffusion of heroin use across the continent is a direct consequence of drug trafficking. Weak detection controls and porous borders along the eastern, western and northern coasts of Africa have facilitated the safe transport of heroin originating in Afghanistan, Pakistan and South East Asia and destined for Europe and the United States. The transshipment of heroin through Africa has increased dramatically since 1990 and this has been accompanied by the development of a local market for heroin in many African countries where it had not previously existed (Dewing, Plüddemann, Myers & Parry, 2006).

A study by Hesper, Huang, Chou and Anglin (2007) investigates trajectories of heroin use and subsequent consequences in a sample of 471 male heroin dependents that were admitted to the California Civil Addict Program in 1964 -1965 and followed over 33 years. Applying a two-part growth mixture modelling strategy to heroin use level during the first 16 years of users' addiction careers since first heroin use, the authors identified three groups with distinctive profiles: stable high-level heroin users ($n = 278$), late decelerated users ($n = 149$), and early quitters ($n = 44$). Study findings empirically demonstrate the chronic nature of heroin use disorders and subsequent adverse consequences including mortality, mental health, and employment. Furthermore, media articles suggest that of all dependents in South Africa, most of whom live in disadvantaged communities, only an estimated 3% undergo treatment. Apart from the nightmare of dependence itself, heroin dependents are in danger of falling into the hands of a breed of drug rehabilitation centres, normally created by owners of a plot of land, good sales and marketing, and a guaranteed influx of cheap labour which enhance profit margins (Louw, 2004; Friedman, 2002).

In the not so distant past, almost anyone in South Africa could open a drug rehabilitation centre, offer rehabilitation services and request a fee for these services - regardless of his/her professional training or background (Bateman, 2006). These facilities are able to fall outside the ambit of the *Mental Health Act* (Act 17 of 2002) and the *Prevention and Treatment of Drug Dependency Act* (Act 20 of 1992) by calling themselves 'care centres'. Such facilities are subsequently not regulated by the National Departments of Health or Social Development. Numerous unregistered examples of such centres still prevail in South Africa (Louw, 2004; Friedman, 2002), and various human rights violations have been reported (Louw,

2004; De Klerk, 2001; De Klerk & Versluis, 2001; Friedman, & Oelofse, 2001; Smetherham, 2001). This situation has also arisen due to the state closing down several long-established centres and reduced subsidies for organisations such as the *South African National Council on Alcoholism and Drug Dependence* (SANCA) (Friedman, 2002; Donaldson, 2001). Psychiatric facilities, registered by the National Department of Health, most often treat substance use disorders as secondary symptoms (Louw, 2004). However, there is a recent trend in psychiatric facilities to open specialised substance use disorder units. Only recently has the *Minimum Norms and Standards for Inpatient Treatment Centres*, which specify the criteria for the registration of residential rehabilitation centres, been issued by the National Department of Social Development (2005) in South Africa. However, the manpower to monitor the standards set is likely to be deficient (Louw, 2004). The criteria for the minimum norms and standards for outpatient facilities in South Africa are still pending. Furthermore, some treatment procedures such as detoxification and rehabilitation can be especially expensive, and a large disparity between the services of the private and public health and welfare sector prevails (James, 1998).

The field of heroin use disorder intervention has been 'in transition' since the outbreak of the heroin epidemic in South Africa. In terms of theory and practice, the field is less in transition now than it was in 1995. Many interventions and procedures have begun to be routinely integrated into clinical practice. In particular, motivational and cognitive-behavioural approaches, following the surge of interest in these approaches in research studies, have made great inroads into practice at the grassroots level. Pharmacological approaches have been updated to include the latest advances in the pharmacological treatment of heroin dependence. Such interventions remain one of the most fervently researched and heavily funded of all approaches to heroin use disorder intervention (Rotgers, Morgenstern & Walters, 2003). However, despite growing evidence of an association with heroin dependents use of supplementary treatment services (such as psychosocial and pharmacological / medical care) and treatment outcomes, and the fact that international emerging standards for substance misuse treatment have called upon treatment providers to enhance traditional addiction services with services that address the psychosocial needs of clients, heroin and substance use disorder treatment programmes in South Africa generally fail to meet these research-based treatment standards, for example, detoxification services are provided for by less than half of all the facilities in Cape Town, while the use of medications specific to the treatment of heroin dependence, despite reasonably strong research evidence for their efficacy, has not become widespread in practice (Myers & Parry, 2002). Furthermore, limited studies regarding psychosocial and / or pharmacological interventions for heroin use disorders have been published in South Africa (Plüddemann & Parry, 2004).

1.2 RESEARCH OBJECTIVES

The research objectives encapsulated below served as a guideline in the capturing, analysis and discussion of the interview information.

- * To compare and integrate the views of long-term voluntarily abstinent heroin dependents with those of heroin use disorder specialists.
- * To obtain expert opinion from heroin use disorder specialists with regard to intervention strategies that best facilitate heroin dependence recovery.
- * To furnish a description of the effective and ineffective aspects of heroin use disorder intervention from the perspective of heroin use disorder specialists.

- * The formulation of tentative suggestions for the advancement of heroin use disorder intervention programmes.

1.3 CHAPTER CONTENTS

This thesis consists of six chapters all of which function interdependently to unify the study. One set of comprehensive information was obtained and then divided into two studies. The first study dealt with the perceptions of long-term voluntarily abstinent heroin dependents. This was recorded in the form of the author's master's dissertation. The second study concerns itself with the acuity of heroin use disorder specialists; this will be used as the basis for the present thesis. The results of both studies are compared, contrasted and integrated. Chapter 2 reflects on a previous study undertaken by the author regarding heroin dependence recovery from the vantage point of 40 long-term voluntarily abstinent heroin dependents. Chapter 3 outlines the various myths regarding heroin use disorders, psychosocial theories and primary intervention modalities. Chapter 4 delineates the research methodology used for the study. Chapter 5 synthesises the results of this study (of heroin use disorder specialists) with the results of the long-term voluntarily abstinent heroin dependents. Chapter 6 furnishes a synopsis of the research results in a concluding discussion.

In Chapter 2 heroin use disorder recovery theories, as well as the results of the study regarding heroin dependence recovery by Dos Santos and Van Staden (2008) and Dos Santos (2006), are discussed in depth. This descriptive study of the experiences and suggestions of 40 long-term voluntarily abstinent heroin dependents revealed that behaviour modification and the promotion of recovery occurred mostly through psychosocial / pharmacological intervention, producing a range of positive effects that facilitated natural recovery processes. Other contributors to promoting behaviour modification are identified and discussed as well. A number of challenges to successful intervention were also identified. Clear support was obtained for the 'maturing out' hypothesis of heroin dependence. It was deemed necessary to include these results since the present study is based on the analysis of data obtained from the forty long-term voluntarily abstinent heroin dependents. The integration and comparison of the results of the two studies provide a rich and informative account of heroin use disorder recovery and intervention.

Chapter 3 explores myths surrounding heroin use disorders, psychosocial theories of heroin use disorders and primary heroin use disorder intervention modalities.

In Chapter 4 the research methodology is discussed with reference to the rationale for selecting a qualitative approach and grounded theory analysis. This is discussed in relation to descriptive research. Data was gathered from the interviews with ten heroin use disorder specialists from various disciplines. A reflection on ethical considerations is also included.

In Chapter 5 the results of the study are discussed as a whole. Relatively little is known in South Africa about the contribution of interventions in facilitating heroin use disorder recovery (Dos Santos & Van Staden, 2008; Dos Santos, 2006; Myers & Parry, 2002). The themes that emerged from the study and their sub-themes are brought together with the aim of capturing a holistic approach to heroin use disorder intervention. The results of the study are summarised in the form of a discussion and draw various associations between the present study and the results of the study regarding heroin use disorder recovery (Dos Santos & Van Staden, 2008; Dos Santos, 2006).

Chapter 6 reflects on the results of the present study in the form of emerging patterns, insights, constraints and recommendations with regard to heroin use disorder intervention.

1.4 SUMMARY

The current chapter contextualised the study by defining the research problem and introducing the reader to the problem of heroin use disorder intervention in South Africa and worldwide. The theoretical, empirical and practical reasons that opened up avenues for this study were also discussed. The overall objectives of the study were also included. Both the research problem and objectives are considered at multiple levels of examination. As this study unfolds, it will further attempt to illustrate meaningful modalities that may facilitate heroin use disorder intervention and recovery.

CHAPTER TWO

DEFEATING THE DRAGON: HEROIN DEPENDENCE RECOVERY

2.1 BACKGROUND

While heroin has been used to meet physiological, mental and spiritual needs since earliest times, it seems particularly compatible with the special needs generated by modern society. Heroin can reduce a psychological or physical pain, fill a spiritual void, confer an identity or kill time - up to a point and at a price. In all cases, the heroin dependent initially perceives use of the substance as providing the most convenient and effective means of filling a dominant need, and has no initial strong disincentives against filling it in this way.

Certainly, the reasons for heroin use as a widespread phenomenon are varied, with the orgasmic totality of the rush, the overall placid euphoria, peer pressure, availability, the hideous conditions of the inner-city, and a host of other factors coming into play, not to mention that once dependence is established, reasons may take a secondary place. Heroin provides a blunting of affect and the chronic user is usually someone who will go to any lengths to turn him or herself off and avoid coming to terms with any psychological disequilibrium. However, the view of heroin misuse as a passive, escapist activity has been challenged and a more active view of the heroin user's life-style has been developed both in terms of the pursuit of pleasure and status (Pearson, 1987). William Burroughs (Burroughs, 1977: xvi), who is regarded as an iconic figure within the heroin counter-culture, wrote:

'Junk is not, like alcohol and weed, a means to increased enjoyment in life. Junk is not a kick. It is a way of life.'

The experiences of heroin seem to be remembered in a similar way, particularly in the early days of use. The warm bath, the removal of all emotional pain, embarrassment, guilt and rejection. To be sure, recovering heroin dependents emphasise that this period only lasts a short while, and that after use sets in, the pattern of dependence, secrecy, boredom, marginalised living and criminal activity is established. The elusive first hit is pursued repeatedly, even when there are no veins left, and the chronic heroin dependent (if he/she survives) knows well that the ultimate high can never be experienced again. Heroin becomes more like a dose of insulin to a diabetic - something the body begins to crave just to stay in a state of normality (Kenny, 1999). Heroin ultimately neglects the user, because it fails to provide long-term physical and emotional support (White, 1999). However, modern day users are much more likely to come from intact families with whom they have retained close links, even if these links have become strained. Indeed, this signifies one of the most significant differences between the new heroin users and former generations, when heroin use was associated more with the bohemian and counter-culture (Pearson, 1997).

The 2007 UNODC World Drug Report (*United Nations Office for Drugs & Crime, 2007*) estimates that globally approximately 16 million people abuse opiates. About 71% (or 11 million people) of opiate abuse relates to heroin. Asia and Europe, in which 70% of the world's total population live, together account for more than three quarters of the world's heroin abuse. In Oceania the proportion of treatment for opiate dependence is declining; this began after the Australian heroin shortage of 2001. Overall, consumption declined or stabilised in established markets, including those of Western Europe

and North America. Countries in the vicinity of Afghanistan and East Africa, particularly Kenya, Mozambique and the United Republic of Tanzania, have reported large increases in heroin use. A considerable increase of opiate misuse has also been reported in some countries in West Africa, including Côte d'Ivoire and Senegal. These increases are possibly a spillover effect owing to the increased availability of heroin which is trafficked through the region destined for markets in Europe and North America. The rate of increase in Africa is the second highest after Asia. The upward trend is particularly noted in South Africa where heroin used to account for less than 1% of treatment demand (including alcohol); by the first two quarters of 2006 this proportion had increased to 7%. This trend in South Africa is clearly above that of the global average and threshold line of 'significant increase'.

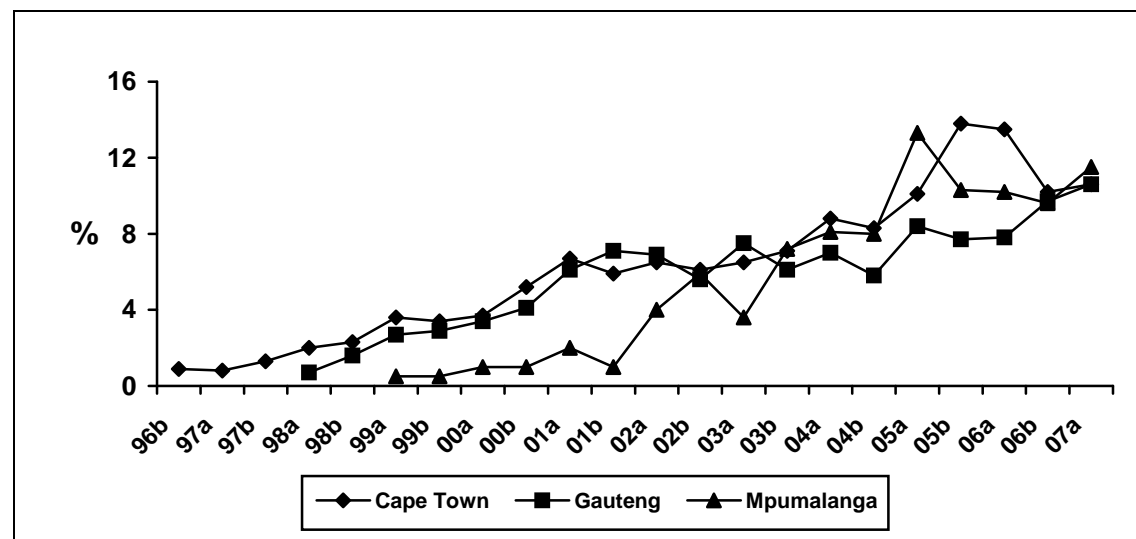
According to Barlow and Durand (1995), most research indicates a need for some level of social support or therapeutic intervention for heroin dependents and a number of models and programmes have been developed in order to help them. Unfortunately, in few other areas of psychology have unvalidated and untested methods of treatment been so widely accepted. Most interventions remain input orientated and little is done to measure their impact and effectiveness (Boone, 2001). However, just because a programme has not been subjected to the scrutiny of research this does not mean it does not work, but the sheer number of people receiving services of unknown value for heroin dependence is cause for concern (Barlow & Durand, 1995). Rocha-Silva (1998) notes that matters were further complicated by the lack of integrated information needed for effective intervention with respect to substance dependents in Africa. One reason according to the researcher is the lack of 'infrastructure' in developing countries that generally facilitates long-term comprehensive and integrated information gathering. However, unlike other sub-Saharan countries, South Africa is unique in that it possesses more recent well-developed capacity for surveillance of and research into drug-related problems. The primary resource of this information is the South African Community Epidemiology Network on Drug Use (SACENDU) project which currently monitors alcohol and other drug use trends in six sentinel sites in South Africa (Parry & Pithey, 2006).

Since the late 1990s there has been a large increase in treatment demand for heroin as a primary drug of abuse in South Africa, specifically in Cape Town, Gauteng and Mpumalanga (see Figure 1, p.8). The figure illustrates that the demand for treatment related to heroin began to increase steadily in the more rural province of Mpumalanga in 2002. It was also noted that the proportion of patients admitted for heroin abuse / dependence that were black / African began to increase in this site. In the first half of 2002, 13% of patients admitted for heroin related problems were black / African (while 87% were white). In the first half of 2007, 52% of heroin patients were black / African while 35% were white. The remaining 15% identified themselves as 'coloured' (of mixed race) or Asian. A similar, although 'slower' trend was noted in the more urban Gauteng province, and in Cape Town an increase in heroin patients who are identified as 'coloured' was also noted. This seemed to indicate a shift of heroin use to historically more economically disadvantaged sectors of the population. Smoking was (and remains) the most common mode of heroin use among this new group of heroin users in all areas (Plüddemann, Parry, Cerff, Bhana, Potgieter, Gerber, Mohamed, Petersen & Carney, 2007; Plüddemann, Hon, Bhana, Pereira, Potgieter, Gerber, Nqini, Petersen & Parry, 2007; Parry, Plüddemann & Myers, 2005; Plüddemann & Parry, 2004). This also compares to a national survey conducted amongst 10-21 year olds in black communities in 1994 by the HSRC, which found that only 0.9% of 1 378 participants reported lifetime, the past twelve-month and neighbours' use of heroin (Rocha-Silva, De Miranda & Erasmus, 1996). A recent emerging trend in a number of cities, especially amongst drug users from

disadvantaged backgrounds, has been the sale of low quality heroin mixed with cannabis known as 'nyaope' in Gauteng, 'unga' in Cape Town, 'pinch' in Mpumalanga and 'sugars' in Durban (where cocaine is also included in the mix) (Parry, Plüddemann & Myers, 2005; Plüddemann & Parry, 2004).

Heroin has shown, on a national level, probably the worst increase of all substances of abuse in the past four years. The trend data presented by SACENDU not only accentuates the changing nature of substance misuse in South Africa toward so-called 'harder' substances, such as heroin, but also highlights an emerging trend toward intravenous heroin use. In Cape Town only 0.7% of all patients ($n = 2\,301$) in treatment facilities during the first half of 1998 had used heroin as a primary substance of abuse, compared to 10% ($n = 2\,795$) in the second half of 2006. The trend in Gauteng has followed the same pattern, with 0.6% of all patients ($n = 4\,348$) in 1988 presenting with heroin as a primary substance of dependence, rising to 10% of 3 295 in the second half of 2006. Heroin was also the third most common primary drug of abuse amongst all patients in Gauteng, and those younger than 20 years in Cape Town (Plüddemann *et al.*, 2007; Plüddemann *et al.*, 2007; Parry, Plüddemann & Myers, 2005; Plüddemann & Parry, 2004).

Figure 1: Treatment demand for heroin (%) as a primary drug of abuse (selected sites in South Africa)



Note: '96a' refers to the first six months of 1996, '96b' to the second six months of 1996, etc.
Source: Plüddemann, Parry, Cerff, Bhana, Potgieter, Gerber, Mohamed, Petersen & Carney, 2007

If heroin use, in particular, continues to increase, we are likely to see even greater levels of drug-related crime than we have done to date. Heroin use disorders adversely affect public health and public order, disproportionately to the number of people who abuse the drug (Boone, 2001). Approximately half of the arrestees surveyed in the '3-metro arrestee study' in Gauteng, Cape Town and Durban tested positive for illicit substances. Results across the three sites and for each of the three phases of the survey showed that between 0.2% and 2.5% of the arrestees reported having used heroin at least once (Parry, Plüddemann, Louw & Leggett, 2004).

The need for research is also reinforced by McIntosh and McKeganey (2002) and Terry (2003), who point out that even though it is commonplace within health and social care services to obtain the views of clients, and to include these views in the planning and delivery of services, this remains a rarity within

the substance use disorder field. Clearly this reinforces the need for further research which aims to explore the views of substance dependents regarding their experiences of recovery.

2.1.1 Co-morbidity

Epidemiological study findings have indicated a high prevalence rate of concurrent mental health diagnosis in heroin dependents (Rodrigues-Llera, Domingo-Salvany, Brugal, Silva, Sanchez-Niubo & Torrens, 2006; Vasile, Gheorghe, Civrea & Paraschiv, 2002; Karam, Yabroudi & Melham, 2002). A concurrent mental disorder can complicate substance use disorder treatment in a multitude of ways, for example, clinically depressed individuals have an exceptionally hard time resisting environmental cues to relapse. The misuse of opiates alone has been associated with a 14-fold increase in risk of suicide, the same order of increase that is found in severe mental illness (Appleby, 2000; Neale, 2000). Another significant challenge to the study of depression in heroin dependents is that heroin and opiate use may induce transient symptoms that are difficult to distinguish from organic mood disorders (Brienza, Stein, Chen, Gogineni, Sobota, Maksad, Hu & Clarke, 2000). Heroin dependents with mental illness co-morbidity are more likely to engage in behaviours that increase the risk of HIV/AIDS, for example, injecting heroin dependents with antisocial personality disorder more frequently share needles (Leshner, 1999). Since the misuse of heroin alone has been associated with a 14-fold increase in risk of suicide, its assessment and management by all professional staff with whom heroin dependents have contact with should be regarded as central to general mental health care (Appleby, 2000; Neale, 2000).

2.1.2 Health consequences of heroin use and HIV/AIDS risk

Heroin use holds a number of implications for the health and well-being of the user. The depressant action of heroin on the central nervous system places the user at risk of an overdose and pulmonary complications, such as pneumonia and tuberculosis. A non-fatal overdose may also have consequences including paralysis, seizures, nerve palsy, peripheral neuropathy and cardiac arrhythmia, many of which result in a lifelong compromising of health and well-being. Research commissioned by the WHO estimates that globally for the year 2000 a median estimate of 69 152 deaths could be attributed to opiate overdose (Degenhardt, Hall, Warner-Smith & Lynskey, 2005).

According to Garrick, Sheedy, Abernethy, Hodd and Harper (2002) data from the Australian Bureau of Statistics indicates that in 2000, a total of 737 deaths attributed to opiate overdose occurred among persons aged 15 to 44 years. A review of all forensic cases from July 1995-February 1997 in Sydney, Australia, found that 4% of all cases were related to drug overdose, while 80% of these were related to heroin (*National Drug and Alcohol Research Centre*, 2002). A retrospective analysis of the deaths of over 2 700 heroin injecting drug users (1985-1998) in Italy showed that 37% were due to overdose and a further 33% were due to AIDS (Quaglio, Talamini, Lechi, Venturini, Lugoboni & Mezzeloni, 2002).

A factor that makes the presence of HIV/AIDS in this population group in South Africa difficult to verify is the fact that the presence of intravenous heroin use and HIV/AIDS in this community is relatively new (Plüddemann & Parry., 2004). The limited evidence available suggests a transition from smoking to injecting as a route of administration among some heroin users. SACENDU has reported that intravenous use by patients with heroin as their primary drug of abuse seems to be increasing, with the proportion of patients reporting injection drug use increasing from 29% in the second half of 1999 to

51% in the second half of 2001 in Cape Town; however, decreasing again to 44% in the second half of 2003. In Gauteng the proportion of heroin patients reporting injection has increased steadily from 36% in the second half of 2001 to 49% in the second half of 2003 (Plüddemann, Hon, Parry, Bhana, Matthysen, Potgieter, Cerff & Gerber, 2002). The long incubation period between acquisition of the HIV virus and the onset of symptoms also makes detection and prevention extremely difficult. There is reason to believe that the reduction of stress and of further challenges to the immune system may do much to defend an infected person's health. However, intravenous heroin users are poor candidates for such palliatives (Leukefeld, Battjies & Amsel, 2000; Kohn, 1987; Robertson, 1987). An infected person may remain asymptomatic for four or more years, depending on other factors, before developing symptoms of the illness. During this period, intravenous drugs may still be used and needles shared, thus spreading the infection rapidly. The spread of HIV/AIDS in heroin dependents is not only attributed to intravenous use. Infected users, particularly the young and single, are likely to spread the virus to the wider population through sexual contacts (Parry, Plüddemann & Myers, 2005). The tendency of some heroin users, particularly females, to finance the habit through sex work, further enhances the likelihood of HIV spreading to the wider community through this transmission group (Leukefeld *et al.*, 2000; Parker, Bakx & Newcombe, 1988; Robertson, 1987).

2.2 HEROIN DEPENDENCE RECOVERY THEORIES

Recovery from heroin dependence is complex and researchers from various disciplines have sought to understand the nature and dynamics of the process involved. Generally held approaches to recovery can be summarised as follows.

2.2.1 Maturing out hypothesis

One of the earliest and most widely quoted accounts of giving up heroin is the 'maturing out' hypothesis of Winick (1962). Winick advanced the theory that heroin dependence is a self-limiting process and that most heroin dependents mature out of their dependence. Based on a study of 7 234 arrestee records of heroin dependents in the United States, which indicated that as age increased, the number of people being arrested for drug-related offences decreased, he concluded that two-thirds of heroin dependents 'mature out' of their heroin dependence in their mid-thirties. The maturing out hypothesis consisted of more than a trend towards cessation of heroin use within a specified age group. Winick (1962) proposed a psychodynamic explanation. He speculated that dependents begin taking heroin as a method of coping with the challenges and problems of early adulthood. Then, some years later, as a result of some process of emotional homeostasis, the stresses and strains of life become sufficiently stabilised so that the dependent can face them without the support provided by heroin.

Despite this contribution, and the fact that the maturing out thesis has been widely quoted in substance dependence literature, Winick's (1962) work has been heavily criticised for failing to provide much information regarding the factors / circumstances under which such a process of maturing out would take place. Prins (1995) argues that in order to gain such details more qualitative research is needed, for example, focusing on why and how people move into and out of substance dependence. Furthermore, although many subsequent studies have confirmed that a high proportion of heroin dependents do cease using heroin after their thirties (for example Prins, 1995; Biernacki, 1986; Waldorf, 1983), many disagree that the maturing out hypothesis provides the only explanation. Waldorf (1983),

for example, identified numerous different routes out of substance dependence. Whilst sources have shown that a high proportion of heroin dependents do cease using it in their mid-thirties, the maturation process is only one way that heroin dependents overcome their dependence. Several other reasons could account for the apparently lower prevalence in older people - more experience in the concealment of drugs, imprisonment and the substitutive use of alcohol and other drugs.

Besides 'maturing out' of heroin dependence, Waldorf (1983) argued that, apart from death, individuals can also 'drift' out of dependence, become alcoholic or mentally ill, give up due to religious / political conversion, 'retire' by giving up the drug while retaining certain aspects of the lifestyle, or change because their situation or environment has changed. Clearly, as the work of Waldorf demonstrates, the maturation thesis is increasingly seen as being only one of several explanations regarding how individuals may overcome their dependence (McIntosh & McKeganey, 2002; Maddox, & Desmond, 1980).

2.2.2 Natural healing experience

Further important insights into the nature of the recovery process come from George Vaillant, who followed alcoholics for forty years, and looked at how those who have pulled out of their difficulties have succeeded. Vaillant (1983, 1996) does not believe that there is a specific age when dependents recover, arguing that the notion of 'burnout' in middle life is a misinterpretation of the relatively smooth attrition among drug-dependent individuals. According to Vaillant (1996), the critical factors in achieving abstinence do not seem to be maturation, psychosocial intervention or even a stable pre-morbid personality or social adjustment, but instead recovery seems to depend on the severity of dependence, and on the individual encountering the right kind of natural healing experience. He argues that there are three general factors contributing to stable remission, which can operate at any stage in the life cycle. The first factor occurs when there is mild substance abuse, which lasts for a short period, and a simple change in life circumstances may lead to complete remission. This is illustrated in Robins' (1993) research, which reveals that a change in environment for many servicemen returning from the Vietnam War resulted in remission, indicating the important role that social context may play in dependence and recovery (see Chapter 3 for an in-depth discussion). The second factor is very severe dependence, which seems paradoxical, but evidence suggests that severity, that is getting tired / hitting rock bottom, may be favourable for recovery (Vaillant, 1996). The third factor is the fortuitous occurrence of life experiences, which disrupt entrenched habits, and minimise relapse. These experiences include acquiring a substitute behaviour that competes with the dependence, encountering compulsory supervision, discovering new sources of hope and self-esteem, and finding new people to love to whom the dependent is not 'in debt'. According to Vaillant these experiences are mutually reinforcing circumstances, found most reliably in Cognitive Behavioural Therapy (CBT) programmes and in groups such as Narcotics Anonymous. Literature reviews of remission from various substance use disorders by Brownell, Marlatt, Lichtenstein and Wilson (1986), Stall and Biernacki (1986) and Miller (1993) confirm these life experiences to be important.

2.2.3 Phases / stages of recovery

Another common approach in the substance dependence field involves describing dependence and recovery in terms of a series of stages or phases. For example, Frykholm (1985), who used the term

'addiction' rather than 'dependence', proposed three phases of addiction referred to as being experimental, adaptation, and compulsive, and three phases of de-addiction, where the process of becoming addicted is reversed. According to Frykholm, the first phase of de-addiction involves a period of ambivalence; where the negative effects of drug use are increasingly felt resulting in a gradual desire to stop using drugs, which is generally offset by a continuation of the pleasurable effects of drugs and a physical dependence on drugs. In contrast, in the treatment phase, attempts at detoxification become more sustained and drug-free periods grow longer. In this phase, the dependent perceives a need for 'external control and support' and so seeks help, and also undergoes a radical reorientation in which he/she suddenly experiences a desire to fulfil the role of ex-addict. The final stage is referred to as emancipatory, and involves the period following detoxification when the dependent effectively becomes an ex-dependent and can remain 'clean' without external assistance (Frykholm, 1985).

Although Frykholm (1985) provided a useful model of substance dependence, his work has been criticised for not allowing for spontaneous recovery from dependence. Other stage-based models, such as that of Waldorf's (1983) six-stage model, do allow for spontaneous recovery, since recovery is said to occur with or without intervention.

Several studies have also shown that the influence of significant others, such as partners or children can be important in the decision to quit (Smart, 1994; Simpson, Joe, Lehman & Sells, 1986; Frykholm, 1985; Waldorf, 1983), for example, Simpson *et al.* (1986) reported that more than half of their sample stated that 'family responsibilities' were important in their decision to cease, while about a third cited pressure from family members as important. Another important factor reported to be influential in the decision to cease is deteriorating health or the fear of health problems (Simpson *et al.*, 1986; Waldorf, 1983; Valliant, 1983), as well as the occurrence of more general negative events such as a period in prison, or the overdose / death of drug-using friends / associates (Shaffer, 1992; Edwards, Oppenheimer & Taylor 1992).

Many heroin dependents cite how their heroin use lifestyle had affected their children negatively. This guilt feeling could be so strong that it acts as a catalyst for ceasing heroin use. Children can be so important because they provide such an uncompromising image of the person the dependent has become as a result of his or her heroin use lifestyle (Schottenfeld, Pantalon, Chawarski, & Pakes, 1999). The decision to quit is often precipitated by certain trigger events. However, these trigger events often come at the end of a period of reflection and review that has continued for some time.

Prochaska, DiClemente and Norcross (1992), who propose that there are five stages in the process of change involved in recovery, developed one of the most popular stage models of recovery. According to their 'stages of change' model, individuals' progress through a series of stages, beginning with 'pre-contemplation', which is the period before the user has considered stopping heroin use. Individuals then progress to the 'contemplation' stage, where the user begins to think about stopping and on to the 'preparation' stage where the decision to cease occurs and efforts are made to prepare for stopping. Subsequently in the 'action' phase specific steps are taken to reduce drug use, and finally in the 'maintenance' stage non-using behaviour is consolidated and the individual becomes an ex-addict. According to the model, individuals can move back and forth between stages or even skip stages, which fits in with the notion of substance dependence as a relapsing disorder. Despite its popularity, like the other models, this account has been questioned, for example, regarding whether dependent behaviour

does actually involve movement through a series of stages. Nevertheless, it is clear that this model has much intuitive appeal, and has been influential in the development of various techniques for dealing with dependencies, particularly Motivational Interviewing (Miller & Rollnick, 1991).

2.2.4 Hitting rock bottom

The fact that a number of conflicting stage / phase models exist, means that there is necessarily some disagreement regarding the precise number of stages which individuals may pass through in order to overcome a substance dependence. However, according to McIntosh and McKeganey (2002), one of the features common to many of these models is the importance of a specific 'turning point', at which the decision to give up drugs is taken and / or consolidated (Prins, 1995; Shaffer & Jones, 1989; Simpson *et al.*, 1986). Such a turning point has been variously described as an 'existential crisis', an 'epistemological shift' or as hitting 'rock bottom'. Whatever the terminology used, it refers to the dependent reaching a point in their drug-using career beyond which they are not prepared to go, and is often accompanied by some experience or event which stimulates / triggers change. For some, this turning point is an essential step on the road to recovery from heroin dependence. Some event may trigger the decision, such as an adverse drug effect, the prospect of going to prison, or losing a child or partner.

According to McIntosh and McKeganey (2002), another common area of substance dependence research focuses on identifying the factors and circumstances which promote or impede the process of recovery. Although the reasons given by dependents can vary considerably from study to study, McIntosh and McKeganey (2002) identify some of the more common and prominent themes. In particular, 'burn out' is reported to be one of the most frequent precursors to recovery, as it seems that sustaining a habit can become an exceptionally difficult and demanding task associated with many problems. This is demonstrated in numerous studies, such as that of Frykholm (1985) and Simpson *et al.* (1986), where the main reason for substance dependents to cease heroin use was that they were 'tired of the life', or words to that effect. McIntosh and McKeganey (2002) point out the similarity of the 'burn out' explanation and Winick's (1962) 'maturing out' hypothesis, since both are products of changes, which could be said to occur naturally with the passage of time.

2.2.5 Spoiled identity

McIntosh and McKeganey (2002) believe that their study helps enhance the understanding of the process of the 'maturing out' from heroin dependence. According to these researchers, the 'maturing out' phenomenon is closely related to that which Goffman (1963) described as the recognition of a 'spoiled identity' and to the temporality of the factors which promote this recognition and that encourage and facilitate the decision to change. One element in this process is that heroin dependents develop close relationships with others over time and acquire a sense of responsibility for them (Schottenfeld *et al.*, 1999; Sayre, Cornille, Rohrer, & Hicks, 1992). A second element may be a product of the natural history of heroin and drug-taking and the changing effect of the drug. Heroin loses the ability to produce pleasure and the use thereof could increasingly be viewed as troublesome.

Clearly the various studies described have been influential in increasing our understanding of the various stages involved in heroin / substance dependence, as well as of various factors which correlate

with recovery. However, according to McIntosh and McKeganey (2002), with the exception of the work of Biernacki and Waldorf (Biernacki, 1986; Waldorf, 1983; Waldorf & Biernacki, 1981; Waldorf, 1970), relatively little is known about the cognitive processes through which the decision to stop using drugs occurs. According to Biernacki (1986), the decision to stop taking heroin comes about when the user's dependent identity conflicts with, and creates problems for, other identities that are unrelated to heroin and other drug use, such as those of a partner, parent or employee, in ways that are unacceptable to them. The key to the recovery process lies in the realisation by the heroin dependent that their damaged sense of self has to be restored with a reawakening of their old identities and the establishment of new ones. Recovery is facilitated by a process through which a new calculus or arrangement of identities and perspectives emerges and becomes stabilised. This process entails a different articulation of identities in which the identities of a dependent become de-emphasised (symbolically and socially) relative to the other identities existing or emerging as part of the person's overall life arrangement (Hughes, 2007; Kellogg, 1993).

McIntosh and McKeganey (2002) believe that concern with the person's sense of self or identity lies at the core of that which distinguishes successful attempts at recovery. The central feature of a 'spoiled identity' is the realisation of an individual that he or she exhibits characteristics that are unacceptable both to themselves and to significant others. The process of recognising and acknowledging a 'spoiled identity' and the subsequent decision to give up drugs were usually the result of a gradual process of realisation, while negative and positive experiences prompted a review of personal identities.

Unlike other literature, the experience of rock bottom-like experiences was not a universal or necessary condition for successful recovery in McIntosh and McKeganey's (2002) study. Like Biernacki (1986), McIntosh and McKeganey (2002) identified two principal routes out of drug use, the rock bottom type or exit via rational decisions; the main difference was being compelled to stop in the former and wanting to cease in the latter. As is the case in other studies (Prins, 1995; Biernacki, 1986), deciding to give up drugs was surrounded by a great deal of ambivalence for the participants in McIntosh and McKeganey's (2002) sample. There was a clear conflict between a desire to change and a reluctance to give up the drug. Indeed, it seems that ambivalence is endemic to the lives of heroin dependents and is present for a large part of their heroin-using career.

2.2.6 Pharmacological effects

In terms of recovery, McIntosh and McKeganey (2002) found that, alongside cognitive and perceptual shifts, important changes in the pharmacological effects of drugs play a major part in the dependents decision to stop using them. It seems that the realisation that the drug no longer forms a positive part of a user's life represents an important turning point, a view that is backed up by numerous researchers (Prins, 1995; Frykholm, 1985; Stimson & Oppenheimer, 1982). The heroin dependent merely feels normal, rather than gaining pleasurable effects. Also, a stage is reached when the process of obtaining and taking heroin comes to be regarded as tedious and unpleasurable. The realisation that heroin is no longer a positive presence in the users life could be an important turning point. However, the physiological dependence may remain a barrier to recovery.

2.2.7 Psychosocial intervention

It seems that the potential role of psychosocial intervention within the recovery process has been downplayed in a sense, with findings such as those of Waldorf and Biernacki (1981) and Stall and Biernacki (1986), suggesting that the proportion of users who manage to overcome heroin / substance dependence without formal psychosocial intervention may be even greater than or equal to the proportion who recover following intervention for their dependence. However, the importance of psychosocial intervention continues to be demonstrated in studies like that of McIntosh and McKeganey (2002), where the interviewees expressed a deep appreciation of various treatment services, such as counselling and support, detoxification and rehabilitation services. There is also evidence to suggest that interventions of different kinds can produce various benefits (Edwards, 2000). However, since research demonstrates that a range of competently applied psychosocial interventions with different theoretical underpinnings are likely to give roughly the same kinds of success rates, it is somewhat difficult to establish what aspects of intervention are particularly effective. Even though the positive components / key facets of intervention remain unclear, it is possible that positive interventions may have the capacity to catalyse and support natural processes of recovery (Edwards, 2000), which this thesis aspires to elucidate.

Even though research suggests that some people recover without the need for treatment intervention (Biernacki, 1986; Waldorf, 1983), there is still a significant proportion who require treatment, which has led to the conclusion by some that treatment intervention is a modest but worthwhile facilitator of natural recovery. According to Edwards, Marshall and Cook (1997), although psychosocial intervention is one of a number of interactive influences that can play a part in recovery, it can be helpful in many ways, for example, it can help to nudge the person towards a more constructive way of seeing things or enhance self-efficacy. Finally, since change must feel good for it to be maintained, a major part of treatment intervention often involves helping people to find rewarding substitutes for their use. Treatment intervention research also points to the reality of between-person variation, in the sense that what one person gains from therapy may be different to someone else's gain (Edwards, 2000; Edwards, Brown, Duckitt, Oppenheimer, Sheedan & Taylor, 1997).

2.3 OBJECTIVES OF THE STUDY

The study explored heroin dependence recovery in a group of long-term voluntarily abstinent heroin dependents. The following research questions were posed:

- * What are the reflections of long-term voluntarily abstinent heroin dependents on the recovery process they underwent?
- * What are the biographic and socio-demographic backgrounds of the long-term voluntarily abstinent heroin dependent participants?

Other specific objectives of the study were:

- * To gain a greater understanding of the long-term voluntarily abstinent heroin dependents perspectives regarding intervention efficacy within the recovery process.
- * To explore the long-term voluntarily abstinate heroin dependents intervention expectations.

- * To determine treatment method outcome according to the long-term voluntarily abstinent heroin dependents expectations.
- * To determine new priorities for future research regarding heroin dependence recovery and intervention.

A scarcity of heroin dependence recovery research is noted in South Africa. A study conducted by Plüddemann and Parry (2004), regarding heroin abuse epidemiology in Cape Town, indicates that a lack of affordable intervention services is problematic, as are an increase in heroin use amongst previously disadvantaged communities, a lack of available detoxification services particularly in state hospitals, younger people starting to experiment with the drug and mixed reactions with regard to the possible efficacy of harm reduction strategies. Findings also suggest that changes are taking place in the profile of users with increasing use among females, Afrikaans speakers and lower socio-economic status populations on the Cape Flats. A more recent study by Parry *et al.* (2005) supports the above-mentioned findings, reporting on the trend data (January 1997 to 2003) of the SACENDU project. Most importantly, the study also highlights the need to develop a strategic plan for intervention before the heroin epidemiological situation deteriorates further.

2.4 RESEARCH DESIGN

A mixed design, making use of the qualitative analysis of in-depth case-study interviews; as well as the quantitative analysis of data from the cross sectional survey regarding the sample profiles, was adopted for the study. The goal of the selected research design can be defined as a means of describing and understanding, rather than explaining and predicting facets regarded to be essential for heroin dependence recovery.

2.4.1 Sampling procedure and data collection

Information was collected from 40 participants, 31 of whom had remained voluntarily abstinent from heroin for over a year, meeting the DSM-IV-TR criteria for Opioid Dependence Sustained Full Remission (*American Psychiatric Association, 2000*). The remaining nine participants fulfilled the DSM-IV-TR criteria for Opioid Dependence Early Partial Remission (*American Psychiatric Association, 2000*). A sample size of 40 was decided upon since the author strove to explore the details rather than the generalities of heroin dependence recovery. Furthermore, the number of long-term voluntarily abstinent heroin dependents is also limited owing to the apparent difficulty in achieving heroin abstinence. Consequently, this was the number of participants that could be recruited within the allocated period. No restrictions were placed on age, gender, ethnicity or area of residence. A snowball non-probability technique was utilised. According to Breakwell, Hammond and Fife-Shaw (1995), this type of sampling technique is particularly useful for 'hidden' or 'hard-to-reach' populations - such as heroin users.

2.4.2 Instrument

For the purposes of the cross-sectional survey, a questionnaire was used to obtain the biographic / sociodemographic particulars of the sample. The survey information focussed on a range of biographic and socio-demographic variables, substance abuse / dependence history and interventions undertaken (psychosocial and pharmacological). Heroin use data was obtained from the SACENDU project for comparison purposes with the socio-demographic data of the present study. The specialist treatment

centres, including state funded and private institutions, constituted the main source of data on heroin use for the SACENDU project. All alcohol and other drug (AOD) treatment centres were requested to join the network. Participation in the network is voluntary. In order to be admitted to a specialist AOD centre, patients were required to meet the DSM-IV-TR criteria for Opioid Abuse or Opioid Dependence (*American Psychiatric Association, 2000*). For the purpose of surveillance, a standardised one-page form was completed on each person treated by a given centre during a particular 6-month period. The form elicited responses regarding the source of referral for treatment, biographical information, the type of treatment received (inpatient and / or outpatient), the primary and secondary substances of abuse, the mode(s) of use and whether the person had received treatment prior to the current episode. The treatment centre staff regularly received training in data collection procedures. In order to ensure data quality, completed forms were checked for missing information and possible miscoding. Ethical approval for the SACENDU project was granted by the Ethics Committee of the South African Medical Research Council in 1996 (Parry *et al.*, 2005).

2.4.3 Semi-structured interviews

Semi-structured case-study interviews were conducted in order to gain a detailed impression of participants' experiences of heroin dependence and that which is needed to achieve long-term heroin abstinence and recovery. The inductive nature of this approach is unique in that it assumes an openness and flexibility of approach, and allows a conceptual framework to emerge from the data (Babbie & Mouton, 2001). The interviews with the participants were tape-recorded and transcribed. The interview comprised a general plan of enquiry, as well as an interview schedule with relevant probes in order to further investigate the recovery process of the participants. The following initiating question was asked;

'Describe to the fullest your process in coming "clean" from heroin.'

The interview protocol was developed to act as a neural prompt in order to enable the participants being interviewed to be as self-reflective and informative as possible in their responses, and to encourage additional information that may not have been volunteered in a more structured approach. A non-directive open-ended approach is generally preferred in explorative studies seeking the uncovering of new insights (Babbie & Mouton, 2001).

2.4.4 Procedure

Interviews were conducted from April 2004 - June 2005. The author also practices in the field of heroin use disorder intervention / rehabilitation, and was able to recruit long-term voluntarily abstinent heroin dependents that were known to her. This familiarity with the subject matter facilitated networking; however, the main sources of participants were acquired through participant referrals from various intervention networks such as mental health professionals, Narcotics Anonymous, as well as word-of-mouth. No incentive was offered to the participants during recruitment. Before the interview commenced, a standardised plan of the interview was read out to each participant, and they were assured of anonymity before signing a consent form. The interview recordings, which ranged from 14 - 42 minutes, were subsequently transcribed.

2.4.5 Data analysis

Statistical analyses were performed on the cross-sectional survey data, relating to the biographic, socio-demographic and drug use history of the participants. Non-parametric statistics was utilised since it cannot be assumed that the long-term voluntarily abstinent heroin dependent population adheres to parametric distributions, and that these measure their parametric alternatives (Breakwell, Hammond & Fife-Shaw, 1995). Content analysis was utilised to analyse the case-study interview data. Common themes were derived from the interviews with the 40 participants in terms of their perceptions with regard to the important factors that facilitated their eventual exit from heroin dependence. The themes and their meanings were then compared with the existing literature on this subject (Babbie & Mouton, 2001).

2.5 RESULTS

2.5.1 Sample profile

The ages of the participants ranged from 16-49, the mean age being 23.98 and the standard deviation 7.721. The highest proportion of heroin dependents interviewed, 40% ($n = 16$), ranged between the ages 20-24 years and the second highest proportion, 30% ($n = 12$), ranged between the ages 16-19 years. The majority of participants, 82.5% ($n = 33$), had never been married. The older the participants, the longer they had remained abstinate from heroin ($\chi^2 = 16.841$; $p = 0.001$; $df = 3$). Regarding gender distribution, 20% ($n = 8$) were female and 80% ($n = 32$) male. Gender did not discriminate between any of the measures except that males in the sample had quit heroin on their own more often than females (Mann-Whitney $U = 80.00$; $p = 0.019$; $\alpha < 0.05$). The majority of participants, 92.5% ($n = 37$), were white. The only other population group represented in this study were black / African at 7.5% ($n = 3$). Most of the participants, 77.5% ($n = 31$), resided within the Pretoria area, while 7.5% ($n = 3$) of participants lived in Johannesburg and surrounding areas. In terms of living arrangements, 87.5% ($n = 35$) of participants lived with a significant other, while 12.5% ($n = 5$) resided on their own. Participants who had lived without family and / or friends over the last year subsequent to them being interviewed, as opposed to those who lived with others, tended to have been dependent on heroin for longer (Mann-Whitney $U = 38.5$; $p = 0.041$; $\alpha < 0.05$). Fifteen percent ($n = 6$) of participants had been incarcerated. The majority of participants were well educated, with 35% ($n = 14$) obtaining some sort of tertiary education, 30% ($n = 12$) having matriculated, while 35% ($n = 14$) ranged between Grade 7-Grade 11 as the level of education completed. However, some of the participants (15%, $n = 6$) who ranged in the Grade 7-Grade 11 category were of a school attending age at the time of participation in the study. The majority of participants, 62.5% ($n = 25$), had completed twelve or more years of schooling, while 37.5% ($n = 15$) had completed 7-11 years. Most of those who had completed more than twelve years of schooling failed at least one grade due to their heroin dependence. Participants with a schooling of 12 or more years had ceased using heroin significantly longer than those with schooling ranging from 7-11 years (Mann-Whitney $U = 120.00$; $p = 0.055$; $\alpha < 0.05$). In terms of employment status, 50% ($n = 20$) were employed full-time while 12.5% ($n = 5$) worked part-time, 22.5% ($n = 9$) were unemployed at the time of the interview, and 15% ($n = 6$) were scholars. Of the 22.5% ($n = 5$) of participants who were unemployed at the time of participation in the study, 10% ($n = 4$) could not find work, 5% ($n = 2$) reported that they could not work due to alcohol and / or drug problems, while a further 7.5% ($n = 3$) could not work due to reasons such as raising children. A further 10% ($n = 4$) reported that there were

other reasons (such as a lack of a work permit) as to why they were unemployed at the time of the interview. The participants demographic and heroin history profiles are summarised in Table 2.1.

Table 2.1 Demographic and heroin history profiles

| Characteristic | Mean | Standard Deviation | <i>N</i> = 40 |
|---------------------------------------|-------|--------------------|---------------|
| Age (years) | 23.98 | 7.721 | |
| Duration of heroin dependence (years) | 2.65 | 2.568 | |
| Years heroin abstinate | 2.88 | 4.404 | |
| Characteristic | % | <i>n</i> | |
| Gender | | | |
| Male | 80 | 32 | |
| Female | 20 | 8 | |
| Ethnicity | | | |
| White | 92.5 | 37 | |
| Black/African | 7.5 | 3 | |
| Marital status | | | |
| Married | 15 | 6 | |
| Divorced | 2.5 | 1 | |
| Single | 82.5 | 33 | |
| Place of residence | | | |
| Pretoria | 77.5 | 31 | |
| Johannesburg | 7.5 | 3 | |
| Cape Town | 5 | 2 | |
| Northern Province | 5 | 2 | |
| Mpumalanga | 2.5 | 1 | |
| United Kingdom | 2.5 | 1 | |
| Living arrangement | | | |
| With others | 87.5 | 35 | |
| Alone | 12.5 | 5 | |
| Educational status | | | |
| Tertiary | 35 | 14 | |
| Matriculation | 30 | 12 | |
| Grade 7-11 | 35 | 14 | |
| Employment status | | | |
| Full-time | 50 | 20 | |
| Part-time | 12.5 | 5 | |
| Unemployed | 22.5 | 9 | |
| Scholar | 15 | 6 | |
| Reason for unemployment | | | |
| Could not find work | 10 | 4 | |
| Heroin dependence | 5 | 2 | |
| Family responsibilities (children) | 7.5 | 3 | |
| Other reasons | 10 | 4 | |
| Ever incarcerated | | | |
| Yes | 15 | 6 | |
| No | 85 | 34 | |
| Frequency of heroin abuse | | | |
| Daily | 95 | 38 | |
| Weekly | 5 | 2 | |
| Primary mode of heroin ingestion | | | |
| Smoked | 37.5 | 15 | |
| Intravenous | 55 | 22 | |
| Snorted | 7.5 | 3 | |

2.5.2 Profile of family background characteristics

A Likert scale was used to evaluate the participants past and present relations with their biological and stepparents. The biological parents of 30% ($n = 12$) of the sample group were divorced, while 7.5% ($n = 3$) had never had, or no longer had, contact with their biological parents. The marital status of their biological parents, or whether they were deceased, did not relate to any of the identified behavioural indices associated with heroin abstinence. No significant differences could be identified between these categories with regard to length of heroin dependence, length and frequency of psychosocial interventions, frequency of ways in which heroin dependence was overcome and length of recovery.

Only 20% ($n = 8$) of participants reported having a stepfather and 12.5% ($n = 5$) reported having a stepmother. Given this fairly low occurrence of stepparents as a sample characteristic, and since initial analyses yielded the same trends in variation as obtained with the profiles of biological parents, it was decided to concentrate only on the views of the sample group's regarding their biological parents.

2.5.2.1 Biological father profile

Of the forty participants in the study, thirty-three (82.5%) responded to questions on a profile of their biological father. The majority of participants, 93.9% ($n = 31$ of 33), stated that their biological fathers were still alive at the time of being interviewed, whilst 90.9% ($n = 30$ of 33) indicated that their biological fathers consistently contributed financially to the household.

Most participants, 66% ($n = 20$), rated varying degrees of verbal abuse / loud arguments with their biological fathers during childhood and adolescence. Only 9.1% ($n = 3$) of the participants reported consistent physical abuse. However, a further 36.4% ($n = 12$) of participants rated varying degrees of aggressive physical contact between them and their fathers. Just over half of the sample, 54.5% ($n = 18$), reported no form of physical abuse by their biological fathers. Only one (2.5%) of the participants reported having been sexually abused by her biological father.

In terms of substance dependence histories, 18.2% ($n = 6$) of participants reported that their biological fathers had been chronic alcoholics during the course of their lives. A further 33.4% ($n = 11$) rated their biological fathers as having abused alcohol to varying degrees. Only one (2.5%) of the participants reported that his biological father was a chronic drug addict. A further 6.1% ($n = 4$) reported that their biological fathers had abused illicit drugs inconsistently. Importantly though, by far the majority of participants, 90.9% ($n = 30$), reported no recollection of psychoactive or illicit substance abuse by their biological fathers, neither did their biological fathers display a pervasive pattern of breaking the law since the biological fathers of the majority of participants, 90.9% ($n = 30$), have never been incarcerated.

Only 12.1% ($n = 4$) were of the opinion that their biological fathers had spent sufficient quality time with them during their lives. Regarding levels of parental strictness, 72.8% ($n = 24$) rated that their biological fathers had been strict (or too strict) with them during childhood and adolescence, while 12.1% ($n = 4$) participants were of the opinion that their biological fathers had been average in terms of strictness.

The majority ($n = 29$) of participants reported that their biological fathers were average to really good parents. The rest ($n = 4$; 12.2%) rated their biological fathers as having been a poor or bad parent. The majority of participants, 75.8% ($n = 25$), reported that their biological fathers had always loved them, while 18.2% ($n = 6$) were of the opinion that their biological fathers loved them to varying degrees. Only one participant (2.5%) felt completely unloved.

2.5.2.2 Biological mother profile

The majority of participants, 90% ($n = 36$ of 40), stated that their biological mothers were currently alive. The biological mothers of the rest were either deceased or the participants had been adopted at birth. Thirty-seven (92.5%) participants responded to questions on a profile of their biological mothers.

In terms of the employment history of their biological mothers, 48.6% ($n = 18$ of 37) reported that their biological mothers had always been employed full-time during their lives, while 12.5% ($n = 5$ of 37) of their biological mothers had been housewives and had never been employed. Most participants, 89.2% ($n = 33$), thought their biological mothers had to varying degrees contributed financially to the family upkeep.

Loud or abusive arguments with biological mothers failed to feature within this category. However, 45.9% ($n = 17$) reported that their biological mothers had almost always or regularly abused them verbally throughout their lives, while a further 35.1% ($n = 13$) recalled some verbal abuse during the course of being raised. Only one participant (2.5%) reported severe physical abuse on a consistent basis, with a further 22.2% ($n = 9$) having experienced some degree of physical abuse by their biological mothers. The majority of participants, 73% ($n = 27$), experienced no form of physical abuse during the course of their upbringing. No sexual abuse was reported.

A total of eight participants (21%) had alcoholic biological mothers. The biological mothers of the majority of the participants (67.6%, $n = 25$) had never abused alcohol or any other psychoactive substances (81.1%, $n = 30$). Only 5.4% ($n = 2$) of biological mothers were regarded to experience chronic substance dependence problems (mostly prescription and over-the counter-medication), while a further 13.5% ($n = 5$) of biological mothers had abused psychoactive substances to varying degrees.

The majority of participants, 91.9% ($n = 34$), stated that their biological mothers had never encountered any form of conflict with the law, while only three (8.1 %) biological mothers had serious or some conflict with the law in the past. Most participants, 94.6% ($n = 35$) indicated that their biological mothers had never been incarcerated.

While only six (16.2%) participants viewed their biological mothers as being very strict, a total of 34 participants (91.9%) spent adequate quality time with their biological mothers during the course of their lives. The greater majority of the sample, 95% ($n = 35$), thought that their biological mothers had been an adequate parent and that they have been adequately loved (91.9%, $n = 34$).

2.5.3 Heroin dependence history profile

The duration of heroin abuse varied from less than a year to twelve years of heroin dependence. The mean average of duration of such abuse was 2.65 years with a standard deviation of 2.568. The majority of participants, 95% ($n = 38$ of 40), abused heroin on a daily basis at the peak of their dependence. The predominant primary mode of ingestion reported was intravenous injection, 55% ($n = 22$). The duration for which they had remained abstinent from heroin ranged from less than a year, (22%, $n = 9$) to 27 years of abstinence (2.5%, $n = 1$). The mean length of abstinence from heroin is 2.88 years.

2.5.4 Substitution with other substances of abuse

Table 2.2 (p.22) summarises the substitution history of the participants. Thirty-one (77.5%) of the 40 participants had abstained for longer than a year from heroin. Of this percentage, 47.5% ($n = 19$ of 31) substituted with other substances of abuse during their heroin abstinent period, most commonly with alcohol at 45% ($n = 18$ of 31), followed by cannabis at 27.5% ($n = 11$ of 31). The third most common

substitution substances were collectively crack cocaine, cocaine powder, hallucinogens and methcathinone, each at 7.5% ($n = 3$ of 31). A further 60% ($n = 24$ of 31) of participants who had abstained from heroin for longer than a year had undergone therapeutic intervention, and 27.5% ($n = 11$ of 31) pharmacological intervention during this period.

Table 2.2 Substitution history

| Substance | longer than a year heroin abstinate $N = 31$ | | less than a year heroin abstinate $N = 22$ | |
|-------------------|--|-----|--|-----|
| | % | n | % | n |
| Alcohol | 45 | 18 | 40 | 16 |
| Cannabis | 27.5 | 11 | 32.5 | 13 |
| Cocaine powder | 7.5 | 3 | 15 | 6 |
| Crack cocaine | 7.5 | 3 | 3 | 12 |
| Hallucinogens | 7.5 | 3 | 15 | 6 |
| Methcathinone | 7.5 | 3 | 2.5 | 1 |
| Inhalants | 5 | 2 | - | - |
| Mandrax | 5 | 2 | 5 | 2 |
| Methamphetamine | 2.5 | 1 | 15 | 6 |
| Benzodiazepines | 2.5 | 1 | 10 | 16 |
| Methadone/Opiates | 2.5 | 1 | 12.5 | 5 |
| Amphetamines | - | - | 5 | 2 |
| Barbiturates | - | - | 2 | 2 |
| Sedatives | - | - | 12.5 | 5 |

Nine (22.5%) participants had not yet abstained from heroin for longer than a year at the time of participation in the study. Of the 40 participants, 22 (55%) responded on the category of substitution with other substances during their first year of remaining abstinent from heroin, although thirteen of the twenty-two who responded, had remained abstinent from heroin for longer than a year. Regarding the twenty-two participants who responded in this category, 40% ($n = 16$ of 22) underwent therapeutic intervention and 27.5% ($n = 11$ of 22) pharmacological intervention during their heroin abstinate period. Alcohol was again the most prevalent substance abused at 40% ($n = 16$ of 22), followed by cannabis at 32.5% ($n = 13$ of 22) and crack cocaine at 30% ($n = 12$ of 22).

2.5.5 Ways in: the formation and development of heroin dependence

Emerging from the content analysis, the interview data yielded seven major themes relating specifically to heroin dependence and heroin dependence recovery. Although the themes are presented separately, there is clearly an interrelationship between them.

It was clear from the analysis that the heroin dependence of the participants was very powerful in nature and was often viewed as being out of their control, because it trapped or 'took hold' of them. Heroin dependence was regarded as harder / different to recover from than most other substances of abuse, although some participants attributed this perception to media and stereotyping.

'For sure, I think that the pharmacotherapy for heroin addiction needs different treatment. I don't believe that that... heroin addicts always think they're different, or special, that they're the worst addicts - the best addicts, the worst addicts. I think that's got a lot to do with media... society thinks that heroin addicts are hopeless, everybody that uses heroin dies, and it's just not true. I know people who used for twenty years and not died. You don't die.'

Nevertheless, the dependence producing power attributed to heroin use seemed to have led to a preoccupation with heroin, as the problem progressively took over their lives and participants also

seemed to lack any sense of choice over their heroin dependence. It appears that as the heroin misuse problem developed, increasing tolerance and physical dependence (discussed later) played a major part in influencing this preoccupation.

McIntosh and McKeganey (2002) also found that once heroin users became dependent, their lives became dominated by the need to feed their habit, and the necessity to obtain money became the overriding preoccupation in their lives. For the participants in their sample, living with heroin dependence meant living a life of deceit and manipulation, in which they would do anything to get heroin, including turning to illegitimate means, such as crime and sex work, in order to support their heroin habit. Similarly, in this study it was clear that many participants lacked a sense of responsibility whilst in active heroin dependence, highlighted by numerous reports of irresponsible / negative behaviour including sex work and criminal activity other than possession of an illicit substance. As in McIntosh and McKeganey's (2002) study, such behaviours were generally conducted in an attempt to fund their habit.

In terms of how the heroin dependence developed, it was clear that whilst the early stages were characterised by a gradual progression towards excessive use, the later stages (when participants were generally dependent or at the peak of their habit) involved many more rapid developments. These changes involved a rapid escalation in use, accompanied by a rapid deterioration, and their use getting further out of control. Such rapid changes exemplify the powerful nature of heroin dependence, which increasingly took control of the life-worlds of the participants. The period between lapse and relapse was also described in similar terms, involving equally rapid changes (the issue of relapse is discussed in more detail later in the discussion).

Heroin dependence led to a significant change in each of the participants as a 'person' in many ways, including their life, lifestyle, identity and perspective. This was exemplified by the participants who noted numerous differences in themselves when they were in active heroin dependence and also in recovery. This finding mirrors McIntosh and McKeganey's (2002; 2001) and Terry's (1999; 2003) theories with regard to identity. In the current study, the majority of participants referred to their identity in terms of the negative impact of their lives as heroin dependents on their sense of self, which was generally reported in the form of a deep unhappiness at the person they had become. Sometimes the dependents sense of repulsion at what they had become was associated with a belief that they had become a 'different' person during their heroin dependence.

2.5.6 Reasons / factors for heroin use

The second major theme to emerge from this study related to the various factors / reasons for heroin use, despite the unpleasant effects of initial heroin use. Participants referred to a wide range of factors, which acted in combination rather in isolation and seemed to contribute to different stages of their heroin use, including their early use, continued / excessive use, and their use following a lapse / relapse.

One of the most common factors influencing initial use was experimentation, which predominantly involved teenage experimentation with peers or with a range of different substances. This finding supports the typical findings within the literature of experimentation with softer drugs in early teens,

followed by a progression to more powerful drugs such as heroin and regular heroin use in later teens / early twenties (McIntosh & McKeganey, 2002). It also coincides with the existence of phases of experimentation in Waldorf's (1983) model, and the experimental phase in Frykholm's (1985) model. However, a proportion of participants either directly experimented with heroin or first used cannabis and then directly began to experiment with heroin.

In McIntosh and McKeganey's (2002) research, compliance appeared to be of a voluntary rather than imposed nature, and likewise the present study indicated that initial use was generally a matter of choice rather than the result of force or pressure. These findings are also consistent with those by a number of other researchers, who have challenged the assumption that one of the main influences on initial drug use is peer pressure (e.g., Pearson, 1987; Krivanek 1988).

According to McIntosh and McKeganey (2002), another main reason for initial drug use was curiosity; the root of the curiosity being the fact that drug taking was clearly enjoyable for those who took drugs. Similarly, in the current study, enjoyment was also highlighted as a major reason influencing both initial and continued / excessive use of heroin. The participants also highlighted the search for a 'high' as a significant reason for their initial and continued use, which is again reinforced by McIntosh and McKeganey (2002), who found that participants' escalating use was often driven by a continuing desire to experiment and find new 'highs'.

Availability of heroin was influential in all stages of participants' use in the study. High availability referred to a variety of situations, such as being in close contact with using persons and being offered and exposed to heroin by them, possessing available money and therefore increasing the potential availability of heroin, or mixing within the heroin sub-culture. This is partially supported by McIntosh and McKeganey (2002), who found that progression to regular use was heavily influenced by the individuals' relationships with their significant others or peer group, since these relationships provided the opportunity and encouragement to use more regularly.

The study also highlighted how all of the stages of heroin use were influenced by the occurrence of negative feelings. Participants often reasoned that using heroin is a way of coping with or suppressing or escaping from such feelings. The analysis revealed a range of negative feelings, including stress, loneliness, depression, boredom, and insecurity, several of which are also highlighted as being important factors in McIntosh and McKeganey's (2002) research (in relation to becoming a regular user only).

In particular, in McIntosh and McKeganey's (2002) study, regular drug use was employed to help overcome feelings of personal inadequacy, particularly as an antidote to shyness or lack of confidence. Similarly, in this study one of the clearest examples relating to negative feelings was using heroin as a way of coping with insecurity and building confidence in order to mix better socially.

'Sometimes I am judgmental on myself, feeling like I don't fit in and I don't belong and there is something wrong with that and me... so, sometimes I really feel like relapsing, at that time I often feel like I don't care in myself...'

Krivanek (1988) also found that boredom, resulting from unemployment or poor recreational facilities served to heighten the appeal of regular drug use by helping to fill a void in the lives of the participants. This idea is supported within the qualitative analysis of the study, where a lack of employment led to a

preoccupation with using heroin and therefore to more excessive use. However, the statistical analysis revealed that employment status did not relate to any of the identified behavioural indices related to abstinence / recovery. Another reason for more excessive heroin use was in order to escape from the heroin misuse problem itself, and / or the various negative consequences of it, such as a lack of employment. This clearly demonstrates the existence of a 'vicious spiral' of use from which it is difficult to escape.

2.5.6.1 Continued / excessive use

Another significant reason for heroin use (at all stages) was as a result of various life problems, such as bereavement, relationship problems, or work stress. As in the case of negative feelings, heroin use was viewed as a way of coping or as a means of suppressing / escaping from these life problems. Whereas McIntosh and McKeganey (2002) found that only a small minority began taking drugs as a way of coping with problematic aspects of their lives, they did however find that once participants had encountered the pleasurable and 'therapeutic' effects, these often became an important reason for more regular use. It also emerged from the present study that various background factors, such as problematic parent profiles and childhood problems might have been influential in the initial heroin use by participants, although these were considered to be interactive contributors rather than the main causes of heroin dependence. A significant proportion of participants seemed to come from relatively intact families with minimal signs of psychopathology. Most of the biological parents of participants (77.5%, $n = 31$) were still alive at the time of participation in the study, with the majority of parents, 62.5% ($n = 25$), still married, displaying appropriate affect and financial stability. Minimal physical or sexual abuse was reported; however, verbal abuse, attention / responsibility deprivation, a tendency toward leniency and alcoholism / problem drinking seemed more pervasive.

As in McIntosh and McKeganey's (2002) study, one of the clearest factors influencing participants' continued use was physical dependence and increasing tolerance levels, whereby increasing amounts of heroin had to be taken in order to achieve the desired effect, or in many cases, merely to function normally and avoid withdrawal. The fear of withdrawal, shared heroin use disorders and the inability to conceptualise a way out of their heroin dependence were cited as important barriers in recovery. Continued heroin use was reported to occur as a result of these various barriers to behaviour change; these are considered in more detail later in the discussion.

2.5.6.2 Lapse / relapse

Specific reasons / factors influencing the use of heroin occurred following a lapse or relapse or substitution with another substance of abuse. Substance dependence is commonly assumed to be a chronically relapsing disorder (Gossop, 2003; Friday, 1992), with recovery commonly following a number of unsuccessful attempts.

One of the major reasons for lapsing was due to a failure to cope adequately with the heroin dependence and the associated cravings. Participants' who had previously received substitute prescriptions, such as methadone and buprenorphine, emphasised that the problem arose due to the lack of adequate supporting therapy and the common occurrence of substitute prescriptions being withdrawn too quickly. As a result, participants often felt unable to cope since they withdrew from the

effects of physical dependence and returned to their original heroin use. Such a common experience has powerful implications for practices in prescribing substitutes.

Other clear factors that participants attributed to causing the lapse / relapse were a lack of effort / commitment to behaviour change, self-destruction, and resuming use because they quickly forgot about the associated negative effects. Another (less common) factor influencing relapse included complacency, whereby the false belief was held that a small amount of heroin use would not result in a full-blown relapse. These relapse findings appear to reinforce the importance of lapse prevention models such as that proposed by Marlatt and Gordon (1985), which advocate the use of a range of strategies to avoid relapse. Further examples of relapse prevention strategies / approaches are alluded to later in the discussion.

'It's very, very hard to stay clean. Initially, I mean. I think for the first nine months that I was clean it was the first thing I thought every morning as I woke up - was about heroin, and it was a daily decision. Then I managed not to use. It's not enough to just wake up in the morning and saying "I'm not going to use", you are presented with situations during the day where you have to continue making decisions and I think a lot of that was habit, but a lot of it was kind of was, was biochemical.'

2.5.7 Going deeper: the negative effects of heroin use

The third key theme to emerge was the negative effects of heroin use, which referred to a wide range of unpleasant consequences, experienced by the participants. These consequences related to physical and psychological health, social and practical effects, and the impact on relationships. Many of these consequences were serious; sometimes persisting for a long time after heroin use had stopped.

2.5.7.1 Physical effects

The occurrence of a general deterioration in physical health, and various use related illnesses / problems is supported by both Prins (1995) and McIntosh and McKeganey (2002). McIntosh and McKeganey (2002) note that deteriorating health is a major occupational hazard of heroin use, with common physical problems for injecting users including serious vein damage, and the risk of contracting HIV/AIDS or hepatitis B, C & G. It seems probable that many of the associated health problems are likely to have been influenced or at least exacerbated by participants not looking after themselves properly, the use of unsterile equipment, and not exercising or eating properly.

'... maybe use your own syringe more than once, boil it in water if you don't have another syringe. Boil it in water and then use it again. I've actually seen people share needles. They would use a needle, and then rinse the needle in normal tap water, and then give it to another person, they would also use it.'

The participants who had been intravenous heroin dependents deliberated on the pros and cons of needle exchange programmes.

'In a good way it's... okay, if you don't have money for needles, then I can go and give in my old needles, understand? In a bad way, you will always continue using heroin; the problem will always be there.'

2.5.7.2 Emotional / psychological effects

A deterioration of emotional and psychological health was also clear in the interviews, with a reported increase in various negative emotions, such as feeling numb, depressed, or experiencing a breakdown, and a variety of psychological problems, such as depression, anxiety / panic attacks, paranoia, psychosis and eating disorders. These results support the DSM-IV-TR (*American Psychiatric Association*, 2000) and Leshner (1999) literature concerning a high co-morbidity prevalence rate in heroin dependence. As was the case in McIntosh and McKeganey's (2002) study, whether participants lived or died became a matter of complete indifference, with some becoming consciously suicidal in a similar way to those in Prins' (1995) research.

Intravenous injection habits have been partly related to the short time between use of the drug, its effects and psychological factors. The whole injection ritual, for example, is subject to operant conditioning as well. As a result, intravenous using participants missed not only the effect of heroin, but also the whole process of shooting up. Some heroin dependents are known to go through the motions of shooting up when no heroin is available and even inject water, and regard giving up usage of the hypodermic needle as more difficult than that of quitting heroin (Friedman, 1992; Pearson, 1987). Finnegan (1995) who studied the cognitive structures underlying heroin injecting behaviours, concluded that drug injection and its related consequences are extremely complex.

2.5.7.3 Interpersonal and social effects

Heroin use led to various negative effects on interpersonal relationships such as increased arguments, a dysfunctional family atmosphere, or the break-up of relationships. A further negative consequence was the social effects, which were most notable in terms of the isolation, societal rejection, stigmatisation and loneliness experienced by heroin dependents. Many were much less socially active when using heroin (often due to a conscious avoidance of non-users) and the resultant change in their social circles.

2.5.7.4 Practical effects

The importance of meaningful employment for sustained recovery was discussed by Krivanek (1988), who suggested that it can provide a particularly useful substitution for the rewards previously found only in using heroin and other substances of abuse. Apart from employment problems, a neglect of other practicalities, such as paying bills and keeping appointments also emerged as a problematic consequence of use, which seemed to relate to a lack of responsibility reported by many participants. This involved various irresponsible / negative behaviours, such as being unreliable, untrustworthy, deceitful, and engaging in criminal activity, most of which were conducted as a means of supporting their heroin habit.

2.5.8 Ways out: realisation process

The fourth significant theme to be highlighted in the study relates to the process of realisation of the heroin misuse problem. It was clear that many participants were unaware of their heroin misuse problem in the earlier stages of their dependence. Not only were they unaware of their escalating heroin use and developing dependence, but many were also unaware of the increasing negative effects

of their heroin use, and that these negative effects were a consequence of their using heroin. The fact that many participants were unaware of the problem was often reported to be due to a denial of the problem or more simply to a lack of awareness, education or understanding of themselves and their heroin dependence. One participant, who consumed large amounts of alcohol in an attempt to minimise heroin withdrawal symptoms, had no idea as to what heroin was or of its dependence producing potential. This lack of awareness is also highlighted by McIntosh and McKeganey (2002), who found that progression to regular use tended to involve an unconscious 'drift' rather than a deliberate decision. Although family and friends only occasionally informed the heroin dependents that they thought they had a problem in McIntosh and McKeganey's (2002) study, it seemed that in the study family and friends were generally aware of the problem even though many participants tried to hide their dependence problem from their significant others.

For at least half of the participants, acknowledgement of the problem appeared to occur as a process, and it tended to be associated with a series of realisations, relating to both the heroin misuse problem and the negative effects of heroin use. It should be noted that for some participants initial awareness of the problem did not automatically result in a full recognition of the problem, it was often very difficult to accept the problem themselves and to admit it to others. However, for many participants, the process involved a sudden realisation, often triggered by 'rock bottom' experiences, highlighting marked individual differences between people in terms of how they experience and recognise their dependence. The presence of individual differences is reinforced by McIntosh and McKeganey (2002), who found that recognition by individuals, could take anything from a few weeks to several months, depending on the chronicity of use and the substance dependents' ability to support their habit.

The experience of withdrawal was an important factor in helping participants to realise their developing heroin dependence. This is reinforced by McIntosh and McKeganey (2002), who point out that recognition usually came with the experience of withdrawal symptoms and the realisation that they needed heroin to function normally. This often occurred when they were deprived of their next fix for some reasons, such as a lack of money or availability. Similarly a factor that prevented realisation of the problem was the fact that participants had a continuous supply or used heroin continuously for a period of time, which masked withdrawal symptoms.

The analysis also revealed that the negative effects of heroin use particularly with regard to the relations of the dependents with their children, was also influential in determining the realisation by the participants that their heroin misuse needed changing (discussed later in the thesis in more detail). This supports McIntosh and McKeganey's (2002) findings that the feelings of the substance dependents' concerning the possible impact of their drug-use on their children were so powerful that this was often sufficient enough to make those with children reassess their drug use.

2.5.9 Taking action: behaviour modification

2.5.9.1 Types of behaviour change

The fifth theme evident from the study relates to behaviour change, and referred to a wide variety of actions to control or stop heroin misuse. Virtually all participants reported numerous / successive unsuccessful attempts to change their behaviour, illustrating the high degree of difficulty involved in

doing so. McIntosh and McKeganey (2002) believe that these failed attempts are not simply a waste of time and that they play a highly significant role in the recovery process, since a period free from heroin and other drug use can often clarify and highlight the extent to which the heroin dependents' identities have been damaged by heroin. Furthermore during abstinence, a heroin dependent can acquire first-hand experience of the alternative life to which he / she might aspire.

The analysis also revealed that attempts to change could be divided into non-serious / temporary and serious types of behaviour change. Non-serious / temporary attempts refer to a less committed attempt to change behaviour, for example, several participants described temporary changes in their early use while having a family, or in order to support their denial, while some participants described how substitute prescriptions were used at times as a security / safety net to allow continued use, or how earlier treatment intervention experiences were treated as a respite from use rather than a serious attempt to change behaviour. Another example of non-serious behaviour change was forced change rather than a positive decision to change by, for example, being forced not to use heroin due to a lack of money or contact with a dealer, or coercion into treatment.

Although many people believe that a 'rock bottom'-type of experience is a necessary condition for successful recovery, this view has been challenged by research such as that of Biernacki (1986) and more recently McIntosh and McKeganey (2002), who have identified two principal routes out of drug use: the rock bottom type route and exit via rational decisions. Similarly, this study recorded the occurrence of both the 'rock bottom' -type experience and rational decision-taking in the sense that participants seemed to experience various decisional balances regarding behaviour change at different times in their heroin using life-worlds. This involved choices that had to be weighed up, for instance in terms of the benefits of staying clean versus the benefits of continued use, or the continued enjoyment of use versus the feeling that use was wrong / dangerous. It seemed that as the process of heroin dependence progressed, the decisional balances generally appeared to shift from favouring continued use, in the early stages, to favouring change rather than continued use, in the later stages.

2.5.9.2 Barriers to change

Certain barriers prevented behaviour change (and therefore acted as reasons / factors for continued use), such as a lack of awareness / denial of the problem, a lack of intervention services or long waiting lists, fear of experiencing withdrawal symptoms, or a feeling of being unable to see a way out of the heroin dependence problem. Obviously such factors need to be addressed if heroin dependents are to be encouraged to engage in behaviour change sooner. In particular, the feeling of being unable to see a way out of the heroin dependence problem meant that even though participants may have recognised that they had a problem and accepted the need to change their behaviour, they may have seen no way of stopping. The need to believe that change is feasible is highlighted as an important factor in producing successful behaviour change by McIntosh and McKeganey (2002), who argue that it was not enough for substance dependents to desire a new identity and life, but that they also needed to believe that this was feasible. Without this, any inclination to alter behaviour would simply disappear.

'In using circles there's a message "no-one gets out of this alive", and that's what I believed. So, that was the attitude that permeated the circles that I was (in)... yea people would go to rehab, come back and they'd use again. So it kind of reinforced itself. But it was certainly the inclination I was in, that I won't get better, it's a life sentence.'

Since dependents must believe that they have the power to change their behaviour, the enhancement of self-efficacy seems to be of considerable importance (Darke, Ross, Mills, Williamson, Harvard & Teeson, 2007; Hesel, Hoffman, Grella & Anglin, 2001; Edwards, 2000). The importance of taking positive actions to promote behaviour change is supported by Prins (1995), who argues that although the decision to change / stop using may be a decisive moment / turning point, very often it is not enough on its own, and therefore the decision needs to be backed up by steps to implement it.

2.5.9.3 Influencing factors

For all participants the balance seemed to tip in favour of behaviour change rather than continued use when the negatives of use began to outweigh the positives and reasons / factors for continued use. This finding resembles the first stage of de-addiction in Waldorf's (1963) model, where dependents are 'going through changes' and the negative effects of drug use begin to be felt. The dependent then makes forced or voluntary attempts to stop, which usually end in relapse. More specifically, some participants in this study reinforced the influence of rock bottom -type experiences and described wanting to cease using heroin as a result of being completely fed up with the negative effects of their heroin use or of being too ill not to go to treatment. It should be noted that in the majority of cases it took some time for this shift in opinions to translate into actual behaviour change, and it is likely that this is because some of the decisions were not as straightforward as implied, considering the vast range of reasons / factors participants described for wanting / needing to continue using heroin. Clearly there is conflict between the reasons / factors influencing one's wanting to change behaviour and the reasons / factors influencing continued / excessive use or lapse / relapse. This view is reinforced by numerous other researchers, such as McIntosh and McKeganey (2002), Prins (1995) and Biernacki (1986) who found that deciding to give up drugs was surrounded by a great deal of ambivalence, with conflict between the desire to change and a reluctance to give up the drug. Indeed, it is argued that ambivalence is endemic to the lives of heroin dependents (and substance dependents in general), and is present for a large part of their heroin-using career. This view is also reinforced by the stage theorist Frykholm (1985), who argues that the first phase of de-addiction involves a period of ambivalence, where the negative effects of drug use are increasingly felt, during which this results in a gradual desire to stop using drugs, it is generally offset by a continuation of their pleasurable effects and a physical dependence on them. The presence of such ambivalence clearly implies the potential role for therapies such as Motivational Interviewing (Miller & Rollnick, 1991; Miller, 1983), which explores ambivalence, and aims to facilitate compliance and readiness for behaviour change.

Another major factor that appeared to be influential in tipping the balance in favour of behaviour change was the changing effect of the heroin. These usually progressed from being positive to becoming increasingly negative. As well as cognitive and perceptual shifts, McIntosh and McKeganey (2002) found that important changes in the pharmacological effects of drugs play a major part in the dependents' decision to stop using heroin. It is suggested that the realisation that the drug is no longer a positive part of a dependents' life represents an important turning point; a view that is backed up by numerous researchers (Terry, 2003; Prins, 1995; Frykholm, 1985). Despite the disagreement amongst stage theorists regarding the precise number of phases / stages involved in dependence and recovery, the presence of a specific 'turning point' is common to many models (Prins, 1995; Shaffer & Jones, 1989; Simpson *et al.*, 1986).

A clear factor influencing behaviour change for participants was the importance of significant others, such as family / children in motivating them to achieve recovery, for example, some participants reported wanting to achieve normality for the sake of their children, or deciding to change their behaviour due to the fear of losing contact with their children. The influence of significant others in the decision to stop using is reinforced in a number of studies (Smart, 1994; Frykholm, 1985; Waldorf, 1983). Since many interviewees felt strong guilt about the ways in which their heroin use had affected the lives of their children, children could act as a powerful catalyst for attempting to give up heroin or enter treatment.

Another major reason for behaviour change was to provide relief from the increasing negative effects of heroin use, for example, on health or relationships. Many participants expressed the view that the need for behaviour change was influenced by a desire for some kind of normality that was free from such negative effects. Again this finding is reinforced in other studies which show that an influential factor in the decision to stop using is deteriorating health or the fear of health problems (Simpson *et al.*, 1986; Waldorf, 1983; Vaillant, 1983), as well as the occurrence of more general negative events such as a period in prison or the overdose or death of drug-using friends / associates (Terry, 2003; Shaffer, 1992; Edwards *et al.*, 1992). The increase in such negative effects seems to be related to the notion of 'burn out', which appears to be one of the most frequent explanations for recovery given by participants in some studies. It seems that sustaining a habit can become an exceptionally difficult and demanding task associated with many problems. This has been demonstrated in studies such as that of Frykholm (1985), where the main reason for substance dependents to stop was that they were 'tired of the life' or words to that effect. McIntosh and McKeganey (2002) point out the similarity of the 'burn out' explanation and Winick's (1962) 'maturing out' hypothesis, since both are products of changes, which could be said to occur naturally with the passage of time. However, there is not widespread agreement regarding this theory: for example, Vaillant (1996) does not believe there is a specific age where substance dependents recover, arguing that the notion of 'burnout' in middle life is a misinterpretation of the relatively smooth attrition among drug-dependent individuals. Instead, Vaillant (1996) believes that recovery seems to depend on the severity of dependence and on the individual encountering the right kind of natural healing experience. McIntosh and McKeganey (2002) found that a similar range of reasons / factors to those highlighted above were influential in behaviour change. However, similarly to Biernacki and Waldorf (Biernacki, 1986; Waldorf, 1983; Waldorf & Biernacki, 1981), McIntosh and McKeganey (2002; 2001) strongly believe that the factor which distinguishes apparently successful attempts from earlier attempts is related to the addicts' sense of identity, rather than any of these factors. More specifically, they argue that substance dependents are stimulated by a desire to restore what Goffman (1963) described as a 'spoiled identity', since they realise that they exhibit characteristics that are unacceptable to themselves and significant others. Although McIntosh and McKeganey (2002) did not claim that a desire to restore identity was sufficient for recovery on its own, they do describe it as a cognitive shift that comes close to being a necessary condition for such change to occur. Within the scope of this study, the issue of recovery of identity was also raised as being an influential factor in recovery from heroin dependence.

2.5.9.3 Spirituality

Spirituality (both spiritually orientated programmes and spiritual 'awakenings') played a decisive role and was regarded as a crucial factor within long-term abstinence and the heroin dependence recovery

process. Some participants referred to undergoing 'spiritual conversions'. The source of substance dependence is regarded by some as a spiritual deficiency, spirituality being a cornerstone in recovery. Higher levels of religious faith and spirituality have been associated with a more optimistic life orientation, greater perceived social support, higher resilience regarding stress and lower levels of anxiety (Heinz, Epstein, & Preston, 2007; Arnold, Avants, Margolin & Marcotte, 2002).

2.5.10 Perceived effects of intervention

The sixth major theme that emerged from the analysis related to intervention. This was clearly very important in the sense that most participants considered it to be a vital factor in achieving recovery. In this study, all but two participants had accessed treatment intervention at some stage and felt unable to achieve recovery independently. Many were unable to detox independently due to physical dependence or were simply unable to cope with behaviour change without external help / support. This finding supports Frykholm's (1985) treatment phase, in which it is proposed that the dependent perceives a need for external control and support, and so seeks help.

2.5.10.1 Positive consequences

In the present study, intervention was clearly central to recovery and in many ways the themes of intervention and recovery are interchangeable or commonly linked together. Various intervention experiences and the cumulative effect of intervention were reported to produce a range of positive effects in terms of heroin and other substance use, physical health, confidence levels, isolation and coping method, as well as an altering of the person in terms of their life, lifestyle, perspective, identity, and facilitating a clearer realisation / awareness of the heroin dependence problem. These findings relating to the positive effects of intervention are reinforced by other researchers (see Darke *et al.*, 2007; Hesel *et al.*, 2001; Edwards, 2000; Edwards *et al.*, 1997). According to Edwards *et al.* (1997), although intervention is one of a number of interactive influences that can play a part in recovery and within the natural healing process (Valliant, 1996), it can be particularly useful, for example, in terms of nudging a person towards a more constructive way of thinking, enhancing self-efficacy, or helping with the choice of an appropriate goal (Darke *et al.*, 2007; Hesel *et al.*, 2001).

'I underwent a tremendous number of interventions. I think for me, the way that I make sense of it, is that it was a kind of cumulative effect of all the treatment. I was quite... confused. In the end I finally got to a point, about four years before I gave up, before I realised that I would give up everything. Eventually I got to a point where I was willing to do what I needed to do and at that point all the interventions that I'd experienced had some meaning.'

According to Edwards (2000), research demonstrates that a range of competently applied interventions with different theoretical underpinnings are likely to give roughly the same kinds of success rates. This obviously makes it somewhat difficult to establish which aspects of intervention are particularly effective. The positive effects of intervention seemed to occur as a result of various positive components / needs, which were reported to be essential for beneficial / successful treatment intervention. One of the clearest components was that of common experience, in terms of being around other substance dependents in treatment. Common experience was reported to be beneficial in providing a more empathetic / understanding environment, where participants could positively relate to each other and furnish more useful / practical advice since they could all draw from their own experiences. This is clearly of significance considering the fact that isolation / loneliness was commonly experienced by

participants. Furthermore, participants described the benefits of being surrounded by people at different stages of dependence, with heroin dependents serving as a reminder of the negatives effects of using heroin, and successful recovering heroin dependents (e.g., people in aftercare) providing hope and serving as potential role models or goals to aspire to (McIntosh & McKeganey, 2002).

'That there was hope, and I think that is one of the key factors in my recovery, and I believe in anyone's recovery is hope and I think that's what I has lost during the years.'

Education also emerged as a crucial component of intervention, both in terms of the various aspects of heroin and other substance dependence, and regarding the availability of treatment intervention services. Some participants felt that earlier education may have been beneficial in engaging them or others earlier in their heroin dependence. Participants also described how intervention provided them with the benefits of talking about problems and obtaining feedback / advice in both counselling and group therapy. Often this setting seemed to enhance confidence and self-esteem, as well as reduce isolation. McIntosh and McKeganey's (2002) research supports the positives of therapy, in particular counselling. In this study, views regarding counselling were generally positive, with participants once again highlighting the value of being able to talk to others about the stresses involved in trying to recover from heroin dependence.

A further intervention component that was reported to be influential in producing positive effects was the adoption of a holistic approach, whereby the entirety of the person was addressed in intervention, and not simply the heroin dependence. The range of targets included behaviours, coping methods, physical and psychological / emotional problems, practical problems, social and relationship difficulties, self-awareness, lifestyle, social circles etcetera, rather than only the heroin dependence problem. The use of alternative therapies in intervention, such as relaxation, or alternative activities such as exercise was also supported. Participants reported that such therapies / activities were beneficial in numerous ways such as increasing self-awareness, distracting the participant from their heroin misuse problem, and providing valued time away from therapy to prevent overload. The use of alternative activities is reinforced in Marlatt and Gordon's (1985) Relapse Prevention model, where one strategy employed to try and prevent relapse involves encouraging clients to pursue non-drinking (although it could be equally applied to heroin dependence) recreational activities previously enjoyed before their substance misuse problem. In addition, cognitive-behavioural skills training approaches, such as relaxation can help recovering heroin dependents achieve a greater lifestyle balance. Furthermore, helping the recovering heroin dependent to increase positive activities, such as exercise, can also improve mood, health and coping, as well as increase self-efficacy, through acquiring new skills from new activities (Neale, Bloor & McKeganey, 2007; Larmier, Palmer & Marlatt, 1999). An additional component that was considered integral to successful intervention was proficient support networks (which is supported in studies by Grey & Fraser, 2005; Heser, Grella, Hsieh, Anglin & Brown, 1999). Participants in the study who had lived without family and / or friends tended to have been dependent on heroin longer; the resulting isolation seemed to exacerbate their heroin dependence problem. Practical support in particular was beneficial to some participants, which is perhaps unsurprising considering the number of practical consequences that occurred as a result of their heroin dependence.

The particular structure of psychosocial intervention was also crucial to some participants, in the sense that it provided an abstinence-based, structured / intensive programme, sometimes over a relatively long period. High-level early intervention and long-term care was regarded as an important strategy in

combating chronic heroin dependence. It was clear that for this sample at least, this type of intervention was considered to be what they needed for recovery. These findings are supported in the studies of Heser (2007) and Darke *et al.* (2007).

'I think that early interventions, early high-level interventions are important. I think that one of the mistakes that I made was the intervention; my early interventions were all low-level intervention. I think that that contributed to the duration of my addiction.'

After long-term residential treatment, re-integration into society was also cited as a difficulty for participants; however, the view of long-term care / long-term residential treatment was highlighted as more realistic in terms of long-term abstinence, supporting the findings of Darke *et al.*, (2007). The final component that was considered necessary for successful intervention consisted of personal factors, such as effort, hard work, discipline and commitment, without which no intervention would have been effective.

2.5.10.2 Accessing / commencing intervention

A significant aspect of intervention was that of a welcoming, friendly and safe environment. This idea is supported by McBride (2002) who stresses the importance of making services approachable, not only geographically, but also socially and personally. McBride argued that the ambience of an agency / setting could have a marked impact on the treatment experience. Considering that one of the difficulties of treatment intervention was that participants often felt nervous, scared, lost and unsure of what to expect at the beginning of treatment, the presence of a welcoming / supportive environment is especially important in helping to ease some of the apprehension experienced. Another less common but seemingly important expectation was some kind of false belief in a 'miracle cure'. This appears to be something that treatment agencies need to consider with new patients / clients so they can be realistic with them regarding the high level of effort required to achieve recovery, and therefore avoid disappointment. This is reinforced by Marlatt and Gordon (1985), who believe counteracting misconceptions to be an important aspect of relapse prevention.

2.5.10.3 Pharmacological intervention

The need for some kind of therapy alongside substitute prescriptions / pharmacological intervention was also reported to be very important. The majority of participants (95%; $n = 38$) had undergone some type of pharmacological intervention. Nine participants (22.5%) were of the opinion that medication was necessary, but were uncertain as to what medication was ideal. Symptomatic medication was administered to 57.5% ($n = 23$) of participants at some point in their recovery process, however, 35% ($n = 14$) could not recall the medical regimes that they underwent. Two participants (5%) underwent morphine intervention for detoxification; twenty-three (57.5%) participants used methadone for detoxification purposes, while methadone maintenance was administered to seven participants (17.5%). Seven (17.5%) participants were of the opinion that opiate medications such as methadone played a vital role in their recovery. Five participants (12.5%) underwent treatment with buprenorphine, naltrexone was utilised by two participants (5%), 67.5% ($n = 27$) of participants underwent treatment with clonidine, benzodiazepines were used by twenty-nine (72.5%) participants, while a further two participants (5%) were treated with DPN (diphosphopyridine nucleotide) infusions. Sleeping tablets were prescribed to eight (20%) participants. Thirty-seven participants (15%) were treated with antidepressant medication during the process of recovery and also on a long-term basis during abstinence.

No cases of pharmacological intervention with anti-psychotic medication were reported. Support and destigmatisation of heroin dependence by the medical sector was cited by a number of participants. Findings indicate that a comprehensive response to heroin dependence should include pharmacotherapy and the medical profession because the phenomenon involves some degree of physical dependence, and heroin dependents as a group are at high risk for various kinds of physical damage. Problems experienced concerning pharmacological interventions are discussed later in the chapter (see 2.5.10.5).

2.5.10.4 Difficulties of intervention

A number of potential barriers to accessing treatment intervention were highlighted, the most common being a lack of and / or affordable services, inadequate specialised staff skills, long waiting lists and lack of awareness of existing services. Interview data revealed numerous difficulties that participants experienced when in treatment. The clearest difficulty was in the need to accept complete abstinence from all substances of abuse. Most participants described experiencing a continued desire to use some sort of substance. The majority of the participants in this study (as discussed earlier), replaced heroin with other substances of abuse, most commonly alcohol, while attempting to give up heroin. Generally however, participants did concede that the acceptance of complete abstinence was an important requirement for recovery.

2.5.10.5 Negative / unsuccessful intervention

Numerous participants described some kind of negative / unsuccessful experience of intervention at some stage in their heroin dependence, including treatment intervention not being sufficiently intensive or long enough, a lack of adequate skills in terms of specialised knowledge of professionals working within the substance dependence field, and a lack of alternative activities or education within intervention programmes. Specific negative experiences of pharmacologic intervention were related to substitute prescriptions, in particular methadone, which participants had usually received in earlier stages of their heroin dependence. A minority of participants viewed substitute prescriptions such as methadone as negative and of no benefit in recovery, while some referred to experiencing extreme withdrawal from methadone. Intravenous buprenorphine misuse was also reported by a few participants. Similar negative views of methadone were expressed by some of the interviewees in McIntosh and McKeganey's (2002) study, although a significant proportion perceived methadone as a wonder drug that had saved them from the depths of their heroin dependence. Although a controversial issue, some research evidence does indicate that methadone and buprenorphine can make a positive contribution in reducing risk behaviour and assisting recovery (Kakko, Svanborg, Kreek & Heilig, 2003; Langendam, Van Brussel, Coutinho & Van Ameijden, 2000). McIntosh and McKeganey (2002) suggest that our understanding of the role of the various pharmacological interventions for heroin dependence is relatively undeveloped, and therefore there is a need for further research, for example, examining the long-term impact of methadone and buprenorphine on the length of a heroin-using career.

2.5.11 Recovery

Recovery was the final theme to emerge from the analysis of the interview data. This was obviously one of the most crucial themes. Potentially owing to the nature of the sample, since 95% ($n = 38$) of

participants had undergone residential intervention, such intervention was one of the most prominent requirements of recovery. Researchers have reported an equal, or greater, proportion of heroin users overcome heroin dependence without formal intervention, to those who do recover following intervention (Biernacki, 1986; Waldorf, 1983). However, the importance of intervention has been emphasised in studies such as that of McIntosh and McKeganey (2002) and the present study, and it has been suggested that intervention may possess the ability to catalyse and support natural processes of recovery (Granfield & Cloud, 2001; Edwards, 2000). Prochaska, DiClemente and Norcross's (1992) model of change, which posits that an individual must be ready to overcome their dependence, otherwise no interventions will affect their behaviour, supports this.

However, a number of other important issues also emerged, including various personal requirements, such as being focused and committed to putting in effort and hard work, being personally ready to change, and accepting that heroin dependence was enduring and that there was no miracle cure. The need for such personal requirements is reinforced by Edwards (2000), who suggests in particular, that dependents need to be motivated (and specific interventions like Motivational Interviewing are useful here), as well as being ready to change, a view strongly influenced by Prochaska, DiClemente and Norcross' model (1992), and supported in the studies by Carpenter, Miele and Hasin (2002) and Dunn, Deroo and Rivara (2001). Another important requirement for recovery was the need to accept complete abstinence from all psychoactive substances. This finding supports Edwards *et al.* (1997), who argued that recovery from severe dependence almost inevitably involves acceptance of an abstinence goal.

The need for a good support network, post-treatment counselling and the security of having a protected environment during residential treatment, as well as one to return to if required, was also deemed to be important. Grey & Fraser, (2005); Edwards (2000) and Hesel *et al.* (1999) reinforce this, stressing the establishment of a personal micro-environment that supports abstinence. Similarly, McIntosh and McKeganey (2002) found that their interviewees valued the ability to drop into a facility or contact someone without prior arrangement, since challenges to their recovery could occur at any time. For some participants, groups such as Narcotics Anonymous and after-care support groups provided such an environment. Studies such as that of Fiorentine & Hillhouse (1999) substantiate the benefits of the 12-Step programme participation.

The analysis also indicated the need for participants to change their behaviour for themselves rather than for other reasons. McIntosh and McKeganey (2002) also found that substantial numbers of subjects expressed the view that drug use could only be stopped successfully if it was done 'for yourself'. According to McIntosh and McKeganey (2002), 'doing it for yourself' represents a clear reference to identity, as many participants felt that success would be unlikely if they sought to stop for the sake of others: success would only come if you did it for yourself, that is, for the sake of your own identity. These researchers note that one of the problems with stopping for reasons other than the self is that the drug is frequently considered more powerful than a range of very good reasons for stopping, and so the only realistic prospect of overcoming this power emerges when the drug-using identity is being rejected.

A range of other factors also seemed to be influential in supporting the recovery process. These include the fear of death from resuming heroin use; the potential guilt / shame associated with a relapse, as well as the support of significant others, and the positive effects of their change on others

(for example family, children). Another highly important component of the recovery process was the internalisation of a range of strategies to neutralise reasons for heroin use. These strategies were either learned through treatment intervention or over time by experience, and included strategies such as reducing high availability of heroin and other drugs / alcohol by avoiding users, changing social circles from users to non-users in order to reduce temptation, using distraction to avoid boredom which may trigger use, and coping one day at a time. The need to use such strategies is reinforced by Neale *et al.* (2007) and Edwards (2000), who suggest that successful recovery involves avoiding relapse, and that this can be done through learning various psychological skills, for example, through Cognitive Behavioural Therapy. Similarly, in Relapse Prevention models such as that of Marlatt and Gordon's (1985), one of the goals is to teach recovering substance dependents to anticipate the possibility of relapse and to recognise and cope with high-risk situations. Once high-risk situations have been identified, various strategies can be used to lessen the risks, such as learning more effective coping strategies, or if this is not possible, taking evasive action, such as leaving the situation when cues / triggers for use are identified (Larmier *et al.*, 1999). In the present study a particularly successful strategy was the acceptance and expectancy of cravings and other problems associated with heroin dependence. This preparation helped participants to avoid panicking when they experienced them, and they could adopt effective ways to cope with them. An important aspect of Marlatt and Gordon's (1985) Relapse Prevention model is to teach clients to anticipate and accept cravings as a 'normal' conditioned response to an external stimulus, rather than seeing the urge as an indication of his / her desire to use. The model describes the use of various urge-management techniques, which can be adopted to deal with such cravings.

2.5.11.1 Changes in recovery

Finally, many participants experienced numerous changes in themselves during their recovery. In the same way that using the drug seemed to produce changes in the user as a person, the process of recovery seemed to begin to reverse these changes, altering the person, in terms of their lifestyle, identity and perspective. Many participants referred to the actual rebuilding of a new kind of person, whilst others (presumably at earlier stages in recovery) expressed the desire to rebuild their lifestyle (see Hesel, 2007). These desires or actual changes generally involved a happier life without heroin and other substances of abuse, and with a study / work place, a new house, and / or new / improving relationships with others.

Laudet (2007), Hesel *et al.* (2001) and Edwards *et al.* (1997) suggest that although specific factors may influence or precipitate change, abstinence is usually best conceived as something built and secured over time, rather than achieved on a particular day. Recovery is most likely to be held onto in the longer term when the abstinate state is felt to be rewarding, with prime rewards being those that can stem from a loving relationship, spirituality, the discovery of a capacity for altruism, meaningful employment, hobbies, further education, and so on.

2.6 DISCUSSION

McKeganey (1995) argues that there is a strong case for linking qualitative and quantitative techniques when investigating the addictions in order to improve the explanatory power of both types of methods. Such a combination of methods is not, however, without its limitations. The analysis of material from

the qualitative section of the study is potentially subject to more author bias than the quantitative analysis. Triangulation is generally considered to be one of the best ways to assess the authenticity of qualitative analyses. Transcripts and analysed texts were also sent back to the participants for their comment on accuracy and enrichment. Peer review of the analyses by both authors also strengthened confidence in the interpretations yielded by the study (Babbie & Mouton, 2001). The small sample size, meanwhile, increases the danger of Type II errors (such that the null hypothesis is not rejected when it is actually false). Additionally, the representativeness of the study population is not certain given that (i) data relating to the total number of recovered heroin dependents is not available in South Africa; (ii) retrospective data has potential difficulties associated with it, such as the problem of recall and the possibility that events and circumstances might be reinterpreted or presented in ways that suit the individuals' current perspective / perception of self. Recall of the past and subsequent perceptions of recovery could be influenced by popular conceptions of how heroin dependence is explained and overcome. Lastly, (iii) since the study relied on self-report with regard to heroin abstinence, participants might have been deceptive. However, many of the participants were acquainted with the author, who was able to verify in most cases, by means of urine testing and consulting with the significant others of the participants and other recovering drug dependents that socialise in the same or related drug life-worlds, that the participants had remained abstinent from heroin. None of the participants in the study were undergoing residential, outpatient or correctional service intervention at the time of being interviewed; it is thus unlikely that they would have had reasons to provide misleading information. Although it is obviously important to bear in mind any potential shortcomings regarding the sample's representativeness, the alternative of following a large cohort of recovering heroin dependents was not viable due to the length of time it would have taken, the associated expense, and difficulties of following up on participants.

Ultimately, however, the aim of this study was not to provide a basis for substantial generalisation. The objective was rather to provide an explorative and descriptive account of heroin dependence recovery from the perspective of a group of South African long-term voluntarily abstinent heroin dependents. To this end, the study possessed two unique strengths that distinguish it from other substance dependence recovery research. Firstly, this study was based on a sample of convenience; the study of community rather than clinical samples avoids bias in that clinical samples are likely to be partial as they tend to include heroin dependents co-morbid for other disorders and they are more likely to over-sample the chronically relapsing heroin dependent (Vaillant, 1996). Secondly, this was the first study in South Africa that has directly obtained the views regarding heroin dependence recovery from long-term voluntarily abstinent heroin dependents themselves. Even though it is commonplace within health and social care services to obtain the views of clients, and to include these views in the planning and delivery of services, this remains a rarity within the substance use disorder field, especially within the South African context. McIntosh and McKeganey's (2002) study demonstrates that recovering substance dependents are capable of providing a considered and informative account of their dependence, recovery and the factors that have helped them.

Consistent with the data collected from the SACENDU project profile of 196 heroin dependents in Gauteng undergoing treatment in the first half of 2003 (Plüddemann, 2003), the results of this study display distinct similarities that could be discerned between age (younger population group), gender distribution (more male), ethnic representation (predominantly white) and marital status (mostly single). Main differences between the two data sets were identified in the categories of level of education

(participants in the study were better educated) and employment status (higher employment rate in the study). Of significance is the finding that participants with a schooling of 12 or more years had stopped using heroin significantly longer than those with schooling ranging from 7-11 years, indicating the possible important role that level of education may play in the long-term prognosis of a recovering heroin dependent. The incongruous findings reflected between this data set and that of the SACENDU data may be due to most participants at the time of participation in the SACENDU project having remained abstinent from heroin for a relatively short period of time, while the participants in this study had been abstinent for a substantially longer period and consequently had more time to stabilise various domains of their life-worlds, such as employment. Of particular significance is the finding that older participants had remained heroin abstinent longer, supporting the 'maturing out' hypothesis of heroin dependence within the limitations of this study. Participants who had lived without family and / or friends over the last year subsequent to them being interviewed, as opposed to those who lived with others, also tended to have been dependent on heroin for longer, signifying the possible role of isolation exacerbating the problem.

The quantitative data analyses revealed that the sample demographics and heroin history data provided little insight into the motivations for heroin abstinence. The seven themes that emerged from the qualitative analyses provided a holistic interpretation of heroin dependence onset and recovery from the perspective of the participants. These included: (i) *the formation and development of heroin dependence*; (ii) *the reasons / factors for heroin use*, which identified key aspects relating to continued / excessive use and various components of relapses / lapses; (iii) *the negative effects of heroin use*, exploring the negative impact dependence on heroin had incurred on various domains of the participants life-worlds (physical, emotional / psychological / interpersonal / social, and practical); (iv) *the realisation process* with regard to the heroin problem of the participants; (v) *behaviour modification* encompassing types of behaviour change (serious / non-serious attempts), barriers to change, influencing factors and the important role of spirituality for a significant proportion of participants; (vi) the *perceived effects of intervention* elucidating the positive consequences of intervention, accessing and commencing intervention, the role of pharmacological intervention, difficulties of intervention and negative / unsuccessful intervention were discussed in depth; lastly (vii) the theme of *recovery* focused on the various changes that participants experienced during recovery.

2.7 SUMMARY

The process of 'coming off' heroin can be protracted. But whether or not someone approaches the question of 'coming off' gradually, with or without pharmacological intervention, or as a swift self-administered withdrawal, each heroin dependent is eventually faced with the problem of 'staying off'. Repeatedly heroin dependents say that this is much more difficult to accomplish. It would be wrong to think of this difficulty, however, as arising from heroin's awesome addictive powers. It is perhaps more a question of the way in which, in order to support heroin dependence, users must structure their lives around the effort to secure a continuous supply. Staying off heroin appears to be as much about rebuilding new routines, new motivations, new identities and new friendships as it is about avoiding the temptations of the drug itself. This is, of course, easier said than done. Factors such as unemployment undoubtedly make it more difficult for people to stay off heroin because of their inability to replace heroin's rigid daily routine with any other meaningful time-structure. Clearly heroin dependence recovery is a complex issue, and there is great variation between individuals and no one single pathway

to recovery. Despite this variation, there is no doubt that increased interest in this area of research can significantly improve the understanding of some of the process involved in long-term abstinence and recovery from heroin dependence. Systematic longitudinal research agendas making use of mixed designs with representational samples and input from heroin dependence specialists may go a long way in improving suggestions for intervention delivery. These would hopefully also facilitate a better understanding of the efficacy of specific forms of treatment service / intervention, thereby assisting in the planning and delivery of future intervention services.

CHAPTER THREE

HEROIN USE DISORDER MYTHS AND PRIMARY INTERVENTION MODALITIES

3.1 HEROIN USE DISORDER MYTHS

At the very heart of the twilight world of drug dependence is the archetypal heroin junky, a nebulous figure misunderstood both by drug takers and by others. To the straight world, the heroin dependent is variously seen as a depraved criminal and as a sick person in need of help; but the heroin dependent is often a fiction even to themselves. The fascination attaches not to the person who is dependent upon heroin, but to their extraordinary shadow (Gossop, 2000). Heroin has not only the singular power to dominate the lives of individuals, but it also exerts an extraordinary symbolic force in society. It acts as a sign under which some of the deepest concerns of people can gather. It creates channels for the transmission and discharge of anxieties far more massive than the actual issue of heroin use would merit. Heroin, particularly in cultures overwhelmed by mass media, is like a creature scuttling across a dimly lit floor. The darkness of the shadow, many times more massive than the animal itself, is more frightening and mysterious than the real thing. It is more difficult to take appropriate action against the creature if one is transfixed by the image it trails (Kohn, 1987).

3.1.1 The serpent

One of the recurrent spectres of the heroin mythology is the pusher. Society is haunted by a stereotype of the pusher as a totally evil and unscrupulous figure, the serpent who corrupts the young and innocent by forcing heroin on them (he/she, of course, does not use heroin or other drugs, being fully aware of their terrible powers). Once his/her victims are enslaved by their dependence - he/she assumes command of their very existences, leading them into a life of crime, vice and degradation (Leggett, 2001; Gossop, 2000).

Although this picture bears virtually no resemblance to reality, it is one of the most popular and enduring of all the heroin myths. Its appeal is that it allays primeval fears about our own vulnerability. There is always a temptation to construct outside enemies as convenient objects for us to blame when things go wrong. When young people become dependant on drugs, the lure to blame the pusher, the demon that takes possession of their souls, often prevails. Any explanation seems preferable to the prospect that heroin dependence may be due to the properties of ourselves and of the social structures we believe to be so blameless. Heroin use disorders reawaken the ancient dread reserved for the omniscient and utterly evil corrupter (Gossop, 2000).

The idea that there was a heroin problem in Britain developed quite suddenly during the 1960s and it seems to have been provoked largely by a sudden change in the numbers of heroin and opiate dependents who were known to the Home Office. Throughout the earlier years of the century, the numbers were uniformly low: there were 367 substance dependents in 1945 and 335 in 1955. However, during the 1960s, the number of youth who were dependent on heroin suddenly began to increase at an alarming rate. In the four years prior to 1968 the number of non-therapeutic dependents known to the British Home Office quadrupled. From a mere 68 in 1958 it had reached almost 2 500 ten years later. At the time, these figures caused considerable alarm. Indeed, the hysteria that greeted the new drug

problem would not have been inappropriate if the Devil himself had appeared on the street of London (Gossop, 2000; Gould, Walker, Crane, & Lidz, 1974).

The inevitable search for a scapegoat soon bore fruit. Several popular newspapers made a great deal of capital out of this new sensation. Pushers were sighted everywhere. One apocryphal story told how pushers had been seen masquerading as ice cream salesmen, lurking outside schools to entrap their innocent victims. Paradoxically, the child who is brought up to believe in the pusher is least well-prepared to cope with the actual offer of heroin. In reality, almost all heroin dealing goes on between users. The attempt to draw some hard-and-fast line between users and pushers is based upon a misunderstanding of the heroin subculture. The first time a person is offered heroin, is most likely to involve a casual suggestion in a relaxed social setting such as a party, and the offer is most likely to come either from a friend or from someone who is already known to the person (Dos Santos, 2006; MacIntosh & McKeganey, 2002; Krivanek, 1988; Pearson, 1987). As a result, the offer is evaluated, not in terms of the conventional morality tale about the evil pusher, but in terms of the current situation and the normal rules of social behaviour. Having been prepared to resist the enticements of a sinister stranger, the person is taken by surprise that they should be offered heroin in such a familiar and ordinary manner (Gossop, 2000).

The myth of the pusher can also take on different guises. At the time, a new angle to the pusher scare was found in the behaviour of a small number of London doctors who were prescribing what appeared to be alarming amounts of heroin and cocaine for addicts. The Brain Committee's 1965 report to the British government identified a small group of junkies' doctors as the major source of supply for the new addicts (Rudgley, 1998; Kohn, 1987).

Six doctors in particular were said to have acted irresponsibly. One of these was Dr Isabella Frankau (Kohn, 1987). In order to keep her patients away from the black market, Dr Frankau was prepared to prescribe whatever they asked for. During 1962, she was said to have prescribed almost 600 000 tablets of heroin. On one occasion she prescribed 900 tablets of heroin to a user and then, only three days later, she issued a prescription to the same individual for another 600 tablets to replace pills said to have been lost in an accident (Gossop, 2000; Kohn, 1997). Two other doctors issued a single prescription of 1 000 tablets. Stated in such bald terms, these figures suggest malpractice. However, without knowing how many heroin dependents were being treated, nor how heavily dependent each patient was, the figures may be misleading. In the absence of this sort of information, it is impossible to arrive at any exact interpretation of each doctor's prescribing habits. For instance, users who are heavily dependent on heroin are known to consume 1 000 tablets of heroin each week. If this is taken into account, the Brain Committee's figures lose something of their initial shock value (Gossop, 2000).

In 1967, another doctor by the name of Dr John Petro ran no surgery but would meet heroin dependents in pubs, or in the teashop at Baker Street Underground station, where he charged £3 for each prescription. After he was arrested for failing to keep proper records of the narcotics in his possession, hundreds of his addict patients turned to other agencies for help. Dr Petro is remembered with genuine affection by some of the heroin dependents he treated - and not merely due to the ready source of narcotics that he provided. Eventually he was struck off the Medical Register, but even as a sad and broken old man, he was occasionally to be seen in the Underground station at Piccadilly Circus, tending to the sores of heroin dependents (Kohn, 1987).

During the intervening years, this story has been repeated so often as an explanation of how the heroin problem arose in Britain that its plausibility is very seldom re-examined. Those who are so ready to condemn these doctors conveniently forget that most other general practitioners refused to have anything to do with heroin dependents, and that there were no specialist drug dependence clinics in Britain until 1968 (Gossop, 2000; Edwards, 1979).

3.1.2 Slavery of the heroin fiend

There are individuals who have used heroin and other potentially dependence producing substances (including alcohol) throughout their lives without suffering any of the physical and mental damage associated with substance dependence. Since the setting up of London drug clinics, there has been a sizeable number of 'stable' heroin dependents who have not been involved in crime, who have not involved themselves with the black-market drug scene and whose physical health has been generally satisfactory; most have been regularly employed. Despite the fact that these heroin dependents are in many respects the most 'normal' group within the heroin dependent population, they have been prescribed larger amounts of heroin than other, more chaotic, heroin dependents (Pearson, 1987; Kaplan, 1983). Heroin itself does not cause the social and psychological, nor even the physical, deterioration that is so often attributed to it. The reasons for such deterioration must be sought in terms of the psychological characteristics of individual heroin dependents and in the social meaning that heroin taking has for them (Dos Santos, 2006). Not only do derogatory descriptions present the most misleading of stereotypes, but they also construct an imaginary type with which the heroin dependent can identify. This is not as far-fetched as it may sound. The myth of the dope fiend is just as firmly entrenched in the junky sub-culture as it is in straight society (Krivanek, 1988; Kohn, 1987).

Indeed, users are often the most fervent believers in their own total and irreversible slavery to heroin. Jean Cocteau's book, *Opium: The Diary of a Cure* (Cocteau, 1957), is based on a set of notes written in 1929-1930; in it he writes how 'one always speaks of the slavery of opium'. This theme runs through most of the junky literature. Few writers have put the position more forcefully than William Burroughs. In his book *The Naked Lunch* (Burroughs, 1968) he wrote:

'Junk is the ideal product... the ultimate merchandise. No sales talk necessary. The client will crawl through a sewer and beg to buy... The junk merchant does not sell his product to the consumer; he sells the consumer to the product. He does not improve and simplify his merchandise. He degrades and simplifies the client.'

Contrary to junky myths about the irreversible and inescapable decline into heroin dependence, the heroin user, like anyone else, faces choices between different options. The decision to give up may be a difficult one. Turning that decision into reality is even more difficult but it is far from impossible (Dos Santos & Van Staden, 2008; Dos Santos, 2006), and most heroin dependents do stop (*American Psychiatric Association*, 2000; Pearson, 1987; Kaplan, 1983). Many also give up without formal treatment (Stall & Biernacki, 1986; Waldorf & Biernacki, 1981). For the heroin dependent, the balance sheet of costs and benefits gradually tends to shift away from an overall benefit to increasingly heavy costs. Some of these costs provide the most important reasons as to why such dependents decide to give up (Dos Santos & Van Staden, 2008; Dos Santos, 2006; MacIntosh & McKeganey, 2002; Gossop, 2000).

3.1.3 Withdrawal: the torment of the damned

The users' exaggerated fear of withdrawal fulfils a similar role, offering a powerful justification for not coming off heroin. The idea that heroin withdrawal involves unbearable pain has proved to be the most convenient fiction for the media. It provides exactly the right sort of voyeuristic titillation for which the general public has shown itself to be so eager. *Basketball Diaries* and *Trainspotting* linger over the agony of heroin withdrawal. The hyperbole of these accounts bears little resemblance to what might more realistically be compared to a dose of flu: certainly heroin withdrawal can be unpleasant and distressing, but it fails by some considerable distance to match up to the myth (Leggett, 2001; Gossop, 2000; Kenny, 1999; Pearson, 1987; Kohn, 1987; Kaplan, 1983).

Although the opiate withdrawal syndrome is one of the accepted criteria of physical dependence, it contains a very large psychological component (*American Psychiatric Association*, 2000; Kaplan, 1983). For most heroin users, withdrawal and craving are inextricably linked: each one produces the other. According to the principles of Pavlovian conditioning, if a user regularly associates a particular place or event with their injection of heroin / drugs, that place or event will acquire some of the rewarding properties of the drug itself. As a result, things that are of no special significance to other people can provoke a powerful need for heroin / drugs in the user. Craving and conditioned withdrawal symptoms can be triggered off by the sight of a regular scoring place, or by music that evokes strong heroin / drug-related memories for the user (Marlatt & Gordon, 1985). Conditioning processes can also have the opposite effect. When a user is badly in need of a 'fix' but possesses no heroin / drugs, they can obtain some relief from their craving by injecting water, or even by just pushing their needle into a vein. This event has come to provide a small part of the drug experience with which it has been so often associated (Gossop, 2000; Finnegan, 1995; Kaplan, 1983; Strang, Griffiths, Powis, Abbey & Gossop, 1992).

The actual process of withdrawing from heroin presents few medical problems and can be managed easily and with the minimum discomfort for the user (Kaplan, 1983). The time taken to complete withdrawal will vary according to the preferences of the doctor and the user, but for heroin it can be completed in anything from a couple of days to two or three weeks. Even heroin users on doses of up to 10 grams can be withdrawn with only moderate discomfort and be symptom-free within as little as ten days (Gossop, 2000). Withdrawal from alcohol and benzodiazepines, for example, carries some of the more serious medical risks, and can be one of the most distressing withdrawal periods for the individual (Gossop, 2000; Kohn, 1987; Friedman, 1992). In comparison, the opiate withdrawal syndrome can be reduced to minimal proportions by a carefully regulated withdrawal regime, yet almost all opiate dependents are terrified of withdrawal. This exaggerated fear makes more sense if it is reinterpreted as a fear of living without drugs. What terrifies the user are not the symptoms of withdrawal, distressing though these may be, but the dawning emptiness beyond, the prospect of learning to live without a chemical crutch (Gossop, 2000; Friedman, 1992).

In this context, it is futile to look for the objective causes of heroin dependence, or to talk of whether or not the heroin dependent can really give up heroin. The attitudes, beliefs and expectations of such a person are of paramount importance. If heroin dependents believe that they are completely helpless before the power of heroin, then they are indeed helpless. But the origins of the helplessness lie in the

psychology of the user and not in some chemical property of the drug (Dos Santos & Van Staden, 2008; Dos Santos, 2006; McIntosh & McKeganey, 2002; Gossop, 2000).

The clearest and most convincing evidence against the heroin user's need to remain dependent is that large numbers of people abandon their dependencies through their own efforts. In her studies of American servicemen, Lee Robins (1993) found that, although the use of drugs was rife in Vietnam, the numbers who became re-dependent on drugs on their return to America was extremely small (the social significance of this study is discussed later). Even among those who had been dependent on opiates (mainly heroin) in Vietnam, only 7% became re-dependent after going home. More than nine out of every 10 dependents were able to give up. Admittedly, the circumstances in which these studies took place are very unusual, but even among the ordinary street heroin dependents it is not generally known that many successfully give up heroin (Terry, 2003; Gossop, 2000). However, more recent studies have shown that heroin dependence is far from being the irreversible condition that it has sometimes been assumed to constitute (see Chapter 2) (Dos Santos & Van Staden, 2008 & Dos Santos, 2006).

3.1.4 Heroin use disorders as sin and sickness

In view of the muddled thinking that surrounds the addictions, it is hardly surprising that there should be even greater confusion about how we should treat people who become dependent on heroin / drugs. This confusion is epitomised in the inimitable Anslinger's, Commissioner of Narcotics, view of the problem. On the one hand, he wishes to regard the person's dependence on drugs as an illness which can be cured by medical treatment; he cannot really bring himself to believe it (Gossop, 2000; Hunt & Chambers, 1976).

After talking of drug dependents as 'unfortunates' who needed treatment, Anslinger reverted to contemptuous references to 'so-called patients' and their dreadful vice that he considered to be anti-social in nature. In the end, Anslinger called for a form of treatment intervention indistinguishable from imprisonment. The essence of Anslinger's ideas on treatment is long-term, forcible control of the user's behaviour; being deprived of freedom of movement and freedom of choice (Gossop, 2000; Hunt & Chambers, 1976; Anslinger & Tompkins, 1953).

It is no great surprise that Anslinger, as Commissioner of Narcotics, should have thought that this was an appropriate way for society to respond to heroin and drug taking. What is even more alarming is to find a 1972 editorial in the *American Journal of Psychotherapy* not only agreeing with most of Anslinger's opinions, but proposing even more extreme solutions to the problem. Among its proposals was that any heroin user with a criminal record predating their dependence should be permanently imprisoned on a work-farm if they committed any other crime while addicted to drugs. Also suggested was the compulsory sterilization of all opiate dependents, and the removal of children from the homes of parents dependent on heroin. These extraordinary suggestions are based on the unsupported assumption that heroin dependents are by definition unable to bring up children properly (Gossop, 2000).

In all discussions of heroin / drug taking there is a danger that moral attitudes may eclipse scientific judgement. Prior to the passage of the Harrison Act in 1914, the average American substance dependent displayed little or no involvement with the criminal world. They carried on their job,

maintaining their home and their family life much as anyone else. A study published in 1928 showed that, out of 119 American morphine dependents, 90 possessed good work records. The same was true of the British dependent until as late as the 1960s. The present-day picture of heroin dependence as a chaotic and criminal activity is largely due to the different people who are now attracted to this subterranean world of heroin. Probably about half of the opiate dependents today have a record of criminal convictions (sometimes an extensive record, and sometimes for serious crimes). Yet it is unwarranted to jump to any simplistic conclusion that their dependence caused the criminal behaviour. Many users become involved in crime *before* they become dependent on heroin. The crime *and* the heroin dependence may sometimes reflect a more general social deviancy factor that led the person to reject a more conventional life. On the other hand, the need to maintain a regular heroin habit places the heroin user in the difficult position of being forced to find huge sums of money or other (generally criminal) ways of obtaining heroin (Gossop, 2000; Krivanek, 1988).

In the *National Treatment Outcome Research Study* (NTORS), more than 1 000 heroin / drug dependents were admitted to residential programmes across England. These people were involved in a massive amount of criminal activity. They had committed more than 70 000 crimes within a 90-day period before starting treatment; most of this involved either drug-selling offences or crimes of theft. These offences were closely related to the need to obtain drugs of dependence (usually heroin). However, within this group, 75% of all the crimes were committed by only about 10% of the heroin / drug dependents. After treatment intervention, those users who managed to stay away from regular heroin use were more than ten times more likely also to stay away from crime than the users who reverted to regular heroin use (Gossop, Marsden & Stewart, 1998).

The moral view of heroin use disorders as a form of depravity is no longer as fashionable as it once was. It is sometimes felt to be more acceptable to say that the heroin dependent is sick. However, in themselves, heroin use disorders constitute neither sickness nor moral depravity (Kaplan, 1983). Heroin use disorders are acquired habits. For most of the 20th century, the American opiate dependent was left completely untreated, except by punishment and imprisonment. In this context, it seemed more humane to try to help users to escape their dependence upon heroin than to simply punish them. As a result, substance use disorders were redefined as an illness. More humane it may have been, but in the end this view may be no more helpful, and it actually perpetuates many of the misconceptions that so bedevil our understanding of substance use disorders. Dr Marie Nyswander was largely responsible for the establishment of the methadone maintenance clinics in America and further perpetuating the disease concept of heroin use disorders (Gossop, 2000; Detzer, 1988; Kaplan, 1983; Stimmel, 1975).

Methadone maintenance is the epitome of the medical approach to heroin use disorders, and it deserves special mention among the junky myths if for no other reason than the fact that it has now generated a multimillion-dollar industry to back it up. In 1975, the annual budget for the New York methadone maintenance treatment project alone was as high as \$20 million. Methadone maintenance embodies several more traditional misconceptions about heroin / substance use disorders, as well as fostering some new ones (Gossop, 2000).

The rationale behind the use of methadone was that dependence on heroin or morphine was a medical disorder, a fault in the users metabolism induced by the repeated use of opiates. It was a disease just as the diabetic could be treated by the daily administration of insulin. Provided that the heroin

dependent was maintained of their methadone, the proponents of this new treatment saw no reason why they should not lead an otherwise normal life (Zickler, 1999; Kaplan, 1983; Stimmel, 1975). Yet this is the same mistake as that made by those who believe in the heroin fiend myth.

The heroin dependent is not an evil, vicious and depraved monster; nor is he or she a perfectly normal person suffering from a metabolic disease. Heroin dependents are individuals (L'Abate, Farrar & Serritella, 1992). Some are friendly, others are hostile; some are law-abiding, many are not. There is no such thing as a single dependent personality. Nor is there a single heroin dependent lifestyle. People become heroin dependents for many different reasons. A considerable number of people who do so experience extensive problems in their personal and social lives; many were involved in crime prior to using heroin. There is no reason why such people should suddenly experience radical psychological and social changes merely because they have switched from heroin to methadone. Equally, some users become dependent on opiates not because of their personal and social problems, but simply due to the availability of the drug. Their access to opiates places doctors and nurses at a much greater risk of dependence than the general population. In such cases, there is no necessary reason why their dependence upon opiates should cause such people to become depraved, vicious criminals as described by Anslinger and others (Gossop, 2000).

As so often in the history of medicine, the new pharmacological treatment (methadone maintenance) gained immediate and uncritical acceptance by many doctors and politicians because it gave the illusion of solving the heroin use disorder problem. Its supporters were soon proclaiming that its effectiveness had been proven beyond any doubt. One textbook of psychiatry cited success rates of between 70% - 90% in the treatment of opiate dependence. In view of the usual poor success rates for such treatments, these optimistic assessments were startling. Unfortunately, as with other instant solutions to the problem of heroin dependence, methadone maintenance failed to live up to its promises. The early experiments were so badly designed that their results were inaccurate and misleading. Methadone did not turn criminal heroin / opiate dependents into law-abiding citizens; heroin / opiate dependents on methadone did not necessarily abandon the junky subculture for the straight world. In documented cases, it did not even prevent opiate dependents from using black-market heroin in addition to their prescribed methadone. Few heroin dependents were under any misapprehension about the new drug treatment (Gossop, 2000). William Burroughs (1961) wrote:

'If the addicts lose their desire for heroin it is because the methadone dosage is stronger than the diluted heroin they receive from the pushers.'

This is not to say that methadone maintenance does not have a role to play. The provision of a free, pharmaceutically pure drug when it is supplied in conjunction with the appropriate support systems (including psychosocial counselling and health care) can help many heroin dependents to escape from the immediate demands of hustling to obtain money for heroin and all the other pressures of the lifestyle (Langendam, *et al.*, 2000; Kwiatkowski, Booth & Lloyd, 2000; Gossop, 2000; Kaplan, 1983). In the AIDS era, much interest has also been shown in the possibilities that maintenance could help dependents to cut down on their injection of heroin and other substances. However, it is wise to be realistic about the levels of improvement. In the Ball and Ross (1991) study, although some methadone programmes gained reductions in injecting and needle sharing, this varied between programmes, and the overall reduction was not significant. When interviewed, as many as 30% of the heroin users in this study continued to inject heroin while on the maintenance programme, even more worryingly,

maintenance has little effect on the percentage of patients who shared injecting equipment (with about 20% sharing needles during treatment). This study demonstrated that the methadone maintenance programmes which enjoyed effective leadership, which provided psychosocial counselling and which enjoyed a strong orientation toward rehabilitation were the most effective. A WHO survey of methadone maintenance programmes in six countries found great variations amongst the ways in which methadone programmes were structured. The effectiveness of these programmes was strongly influenced by treatment effects other than the drug itself (Gossop & Grant, 1990).

Finally, it is also important to note that the treatment gains were usually restricted to those who continued to receive the methadone maintenance intervention. When heroin dependents left the programme, they were typically found to relapse to previous drug-taking patterns (Gossop & Grant, 1990). Many extravagant claims have been made for methadone maintenance. First, it was claimed that methadone provided a 'cure' for the metabolic disease of addiction. More recently, it has been claimed that methadone maintenance provides a sure and certain treatment which will prevent the transmission of HIV and the increase of AIDS. It would be a pity if these claims were allowed to draw attention away from the useful, if limited, role that methadone or other pharmacotherapy can play in the management of heroin use disorder problems (Gossop, 2000).

There undoubtedly are occasions in which it is useful to prescribe maintenance drugs (including heroin) to heroin dependents. Many heroin dependents can make impressive changes in their drug-taking patterns and in their social lives when supported by maintenance drugs (Langendam *et al.*, 2000; Kwiatkowski *et al.*, 2000; Gossop, 2000; Kaplan, 1983). However, not all heroin dependents will show such benefits and some may even be damaged, becoming trapped by replacing their chaotic street world of drug taking with the safer but institutionalized environment of maintained drug taking (Gossop, 2000).

'Methadone itself has turned out to be another illusion providing a spurious belief that one was accomplishing something by not using heroin.' (Sharples, 1975).

3.1.5 The social context

The Vietnam War held many unpleasant surprises for the Americans: not least among these was the widespread use of drugs by American troops. By 1970, almost every enlisted man in Vietnam was being approached by someone offering him heroin - usually within the first few weeks of his arrival in the country. By 1971, it had been estimated that almost half of the enlisted men serving in Vietnam had taken opiates (mainly heroin) on at least one occasion. Most of those who used opiates used them repeatedly and over a long period. As many as 20% of the troops in Vietnam felt that they had been dependent on opiates. This was a cause of considerable alarm to both the military and civilian authorities. At a time when the defence of South-East Asia against the communist menace was felt to be essential for the maintenance of the American way of life, it was not reassuring to hear that a substantial proportion of the fighting troops were using heroin. Nor was there much comfort in the thought that the tens of thousands of heroin dependent might soon be discharged from their duties in the killing zones of Vietnam onto the streets of America (Terry, 2003; Gossop, 2000; Kenny, 1999; *Vietnam & America: A documented history*, 1995).

Even more shocking were the startling revelations about the behaviour of the troops in Vietnam (many of these were so unpalatable to the Americans at home that they were not believed). In 1968, there occurred what the official inquiry was later to refer to as the 'unusual events' of My Lai; these included individual and group acts of murder, rape, sodomy, maiming and assault on non-combatants, almost all of whom were women, children and old people (My Lai Massacre, 2007; Gossop, 2000).

There was some speculation that these various incidents and atrocities could have been the result of drug taking. There is no such evidence to support this. It makes more sense to regard the extensive drug taking as a symptom of the breakdown of morale, combined with an increased awareness and the use of drugs in all sections of American society during that period. However, it remains one of the darkest ironies of the American involvement in Vietnam that the heroin sold to the troops was flown into the country in planes paid for by the US government. Unlike almost everything else that the Vietnamese sold to the Americans, this heroin was of excellent quality. This was one of the real presents from Indochina to America, and from Nixon and his predecessors to the men of the US army (Gossop, 2000; Kenny, 1999; *Vietnam & America: A documented history*, 1995).

It must have surprised everyone that, when these men returned to America, only a minority of them became re-dependent. After their discharge from the army, only 7% used any opiate drugs, and less than 1% felt that they had been dependent on drugs since their return. Even among those who said that they had been dependent on opiates in Vietnam, less than 10% asserted that their dependence had continued beyond their return. Compared with the usual civilian statistics regarding opiate dependence, these figures are remarkably low: one might have predicted that many more of the men would have experienced serious problems relating to the use of opiates. The low re-dependence figures are also surprising in view of the psychological readjustment problems experienced by many of the returning soldiers. Post-traumatic stress syndrome was increasingly recognised among these individuals (Terry, 2003; Gossop, 2000; Kenny, 1999).

There are a number of separate influences at work here, each of which affects the likelihood of heroin taking. During the Vietnam War, these combined to provide the conditions in which this activity was most likely to occur. Psychologically, the experience of suddenly being removed from a safe, familiar environment to a strange, foreign and extremely threatening one increases the pressure upon the individual to take drugs. Drugs are a useful means of coping with the mixture of fear, physical tiredness and boredom that is such a familiar feature of military life during a war. Socially, the tour of duty in Vietnam was characterised by a removal of many of the usual social and moral restraints that reduce the likelihood of heroin taking. The soldiers themselves were inclined to regard their tour of duty as something separated from 'real life' and there were various social pressures to take drugs simply because so many others were using them. Last but not least, there was the physical availability of heroin and other drugs. It is difficult to imagine conditions more likely to promote their widespread use (Terry, 2003; Gossop, 2000; Kenny, 1999; *Vietnam & America: A documented history*, 1995).

What happened in Vietnam and afterwards conflicts with several popular beliefs about heroin use disorders. It is usually assumed that heroin dependence is an inevitable consequence of using the drug, and that, once it has taken hold, it is virtually impossible for the user to rid himself of the habit. The Vietnam experience shows that neither of these beliefs is true. Even of those who were dependent in

Vietnam, the vast majority were able to cast off their use when they returned to America (Gossop, 2000; Kenny, 1999).

This curious episode in the history of heroin taking is a good example of the ways in which changes in social circumstances can have a powerful effect upon the ways people use heroin. The young men who served in Vietnam were removed from their normal social environment and from many of its usual social and moral restraints. For many of them it was a confusing, chaotic and often extremely frightening experience, and the chances of physical escape were remote except through the hazardous possibilities of self-inflicted injury. As a form of inward desertion, heroin represented a way of altering the nature of subjective reality itself. The Vietnam War veterans' experience contradicts the notion that heroin dependence is related to individual psychopathology or criminality: how the public sees the dependent depends on who the public are. In other words, how heroin dependents are treated and, in turn, how they see themselves, have more to do with social context than it does with individual deficiencies (Terry, 2003; Gossop, 2000; Kenny, 1999).

3.1.6 The dangers of heroin

Few people doubt that heroin is a killer drug. After all, the newspapers never tire of bringing us new examples of 'drug deaths' and the most recent examples of these have comprised AIDS deaths. In the same way, the medical journals report the range of diseases 'caused' by heroin use disorders, of which liver disease and blood poisoning are the two most common. Yet the facts of the matter are quite different. Rather than being a particularly dangerous drug, heroin itself is comparatively safe; it is safer, for instance, than alcohol (Gossop, 2000; Friedman, 1992).

The dangers of heroin use disorders owe far more to the psychology of the user and the ways in which users make use of the drug than to any property inherent in the drug itself. Yet, for most people, this conclusion seems to run contrary to the vast weight of evidence. The death rate among opiate dependents, for instance, is higher than that of the general population (Gossop, 2000; Barlow & Durand, 1995). Several estimates have suggested that heroin dependents are twenty times more likely to die than comparable groups of non-heroin dependents. Many of the former show a remarkable lack of concern for, if not deliberate disregard of, their own physical welfare. Some openly express their wish to die, and sometimes their behaviour reflects this (Kohn, 1987; Robertson, 1987). The analogy between opiate dependence and death has been a recurrent theme in literature. Jean Cocteau wrote in his *Opium: The Diary of a Cure* (1957),

'Death separates completely our heavy waters from our light waters. Opium separates them a little.'

It is important not to lose sight of the fact that the injection procedure is a separate feature of drug taking from the direct drug effects themselves (Finnegan, 1995). Many complications of heroin taking can be traced to the injection rather than to the drug. Heroin dependents often use unsterile or even downright dirty equipment to inject themselves. This habit can lead to septicaemia (blood poisoning) and to such other infections as endocarditis (infection of the heart valves) and viral hepatitis (Alavi, Naicker, & Cassim Peer, 2003). Each of these infections seriously weakens the sufferer's health, and can even lead to death. But none is directly caused by the drug itself. They are consequences of the dangerous

and ill-advised ways in which the heroin user takes the drug, and are specifically linked to the route of heroin administration (Gossop, 2000).

Many heroin injectors become infected with one or more of the hepatitis viruses. The forms that most affect them are hepatitis B, C and D. These are serious infections that can lead to cirrhosis and liver cancer and they can be fatal. Hepatitis infections can be spread both by sharing injecting equipment and by sexual contact (Parry *et al.*, 2005; Quaglio *et al.*, 2001; Leukefeld *et al.*, 2000; Parker *et al.*, 1988; Robertson, 1987). Many heroin users are exposed to a high risk of infection when they first start to inject heroin since they are more likely to share injecting equipment with the person who introduced them to the habit at that time. There are other complications associated with persistent injection into a vein, especially when done clumsily. The formation of scar tissue and other vein damage can eventually lead heroin dependents into the situation where they find it increasingly difficult to discover any further sites to inject themselves. When this happens, a minority may reconsider the wisdom of continuing their use of heroin. Some others adopt alternative routes of administration, perhaps by injecting into muscle tissue. Least sensible of all are those heroin dependents who continue to search for more and more hazardous injection sites (Gossop, 2000).

Probably the single most alarming recent development has been the virus leading to AIDS. AIDS was first identified as a new syndrome in 1981 and by 1984 the Human Immunodeficiency Virus Type I (HIV 1) had been identified as the cause of AIDS and its associated clinical conditions. HIV infection can lead to several consequences. Some people develop no symptoms: some become slightly unwell, often with swollen glands. Some develop a number of symptoms with varying degrees of disability. Most serious of all are those cases in which people proceed to develop the AIDS syndrome, which often includes pneumonia and a rare form of cancer. AIDS is almost always fatal. Probably all who carry the virus are infectious to others (Leukefeld, *et al.*, 2000). Every drug user who shares needles or syringes is at risk, even from the very first injection. There are also risks attached to sharing spoons or other pieces of equipment that have been used to prepare injections. One of the first parts of Britain to be badly affected was Edinburgh, where a 1986 survey of injectors found that more than half of them suffered from HIV infections, a rate higher than in any previous European study, and similar to that reported in New York City (Gossop, 2000; Robertson, 1987).

Injecting equipment may be shared because of the limited availability of sterile equipment at places where heroin injectors meet socially or to obtain drugs, and as a result of heroin taking or bonding rituals. In Edinburgh, the low availability of needles was largely due to an anti-drug campaign to prevent drug users from having access to injecting equipment. It is a tragic irony that the same anti-drug campaigns which have made it harder to obtain needles and syringes have also caused injury and death to heroin takers, as well as creating limited public health risks by encouraging them to reuse and to share their equipment. From the experiences of New York, Milan, Edinburgh and Bangkok, it is known that HIV infection can spread among heroin injectors with alarming speed (Gossop, 2000; Robertson, 1987).

Many heroin injectors have now learned to reduce their risks of HIV infections by not sharing, by sterilizing injection equipment, or at least by sharing less often and with fewer partners. In Edinburgh, for example, the peak of HIV infection occurred during 1983-1984 and the rate of infection due to needle

sharing had dropped since then. Many of the more recent infections have been due to sexual transmissions of the virus (Gossop, 2000).

Most heroin takers are young and sexually active, and HIV infection among heroin takers may be spread by either sexual activity or drug injection practices. HIV infection among heroin injectors can pose a serious risk to their sexual partners, whether or not they themselves are drug injectors. Indeed, many heroin users who do not themselves inject heroin are likely to mix socially and sexually with drug injectors. It would be unfortunate if an emphasis upon avoiding risky injecting behaviour were allowed to draw attention away from avoiding the risks associated with HIV transmission through sexual behaviour. HIV can also be transmitted from a seropositive mother to her baby and this problem is also increasingly linked to drug injection, whether by the mother or by her sexual partner (Parry *et al.*, 2005; Quaglio *et al.*, 2001; Leukefeld *et al.*, 1990; Parker *et al.*, 1988; Robertson, 1987).

3.1.7 The mysterious case of the heroin overdose

Another well-publicised form of heroin-related death is the overdose. Until the increase in the numbers of young people dependent on heroin, there were relatively few fatal overdoses. By the 1970s, this had changed and overdoses had become a major killer of young people. Since the 1970s, thousands of deaths, particularly in New York, have been attributed to heroin overdoses (Gossop, 2000; Densen-Gerber, 1973). This is a most peculiar observation, for several reasons.

In the first place, the quality of street heroin in New York was, for many years, extremely poor. The purity of street heroin was often less than 10%, and one analysis of a range of street drugs taken from Brooklyn dealers revealed a heroin content of only one part in a thousand. This analysis found 16 different adulterants, of which quinine was the most common. In London, the quality of street heroin is somewhat better, with a heroin content of about 50%, though this still leaves the heroin user employing a mixture with half of its ingredients unknown (Gossop, 2000).

One theory concerning heroin overdose is that they are really caused by the impurities in the street drugs. Quinine, for instance, can cause death in a way that matches up almost exactly with the symptoms described in cases of heroin overdose. Another theory, and one to which many heroin users subscribe, suggests that overdoses are a result of unexpectedly pure samples of the drug. Although not impossible, this is unlikely. Packets of heroin found near the bodies of dead users have been analysed and found to contain heroin of the same strength and sort as ordinary packets. In any case, if street heroin were of such unpredictable strength, the non-tolerant experimenter would be most at risk. In fact, it is usually the experienced long-term dependent that dies in this way. Another, and more plausible, hypothesis is that alcohol (or, more precisely, the joint effect of alcohol and heroin) is the real villain. Even an ordinary, safe therapeutic dose of an opiate such as morphine or heroin can be fatal when administered to someone who has already been drinking. What masquerades as a heroin overdose may actually be due to the interaction of alcohol and heroin. The two drugs do not mix (the same is true of heroin and both benzodiazepines and barbiturates, which are also injected by addicts) (Gossop, 2000).

Overdoses are a much more common event among heroin users than is usually acknowledged. Some studies have found that most regular heroin users, at some time, take an overdose. Not surprisingly,

intravenous heroin users are at highest risk. In one study of heroin users, only 2% of the heroin chasers had overdosed, compared to 31% of heroin injectors (Gossop, 2000). Gossop's (2000) research further found that two-thirds of a sample of heroin users had overdosed at least once, and that the users who are most at risk are those who take several drugs (particularly alcohol or sedative-type drugs) at the same time as heroin.

3.1.8 The therapeutic landscape

The history of heroin use disorder intervention has often been characterised by fads and fashions. Some of the treatments that have been used have been, at best, ineffective and, at worst, harmful and occasionally even dangerous. It is a sad reflection upon the field that practices and procedures for the treatment of heroin use disorders can so easily be introduced and applied without (or even contrary to) evidence. This is illustrated by the extraordinary range of interventions that have been used to detoxify heroin dependents. Several of these treatments have been more dangerous than the untreated withdrawal syndrome (Kleber, 1981). Interventions have included the administration of hyoscine, strychnine, and nitroglycerine, as well as belladonna treatments involving the administration of scopolamine (causing hallucinations and agitation, requiring physical restraint by 'a strong nurse'). Other extreme forms of treatment have included electroconvulsive therapy, and insulin-induced hypoglycaemia (Gossop, 2003).

The risks of such treatments are indicated by reports that, in a hospital where 130 patients were given the hyoscine treatment, there were six deaths in a year. This should be judged in terms of the context that, although the heroin withdrawal syndrome causes considerable discomfort, it is of relatively short duration and is not medically serious, much less life-threatening. The use of sodium thiocyanate was found to lead to delirium and psychosis, often lasting as long as two months. Some of the treatments may appear reassuringly old-fashioned, little more than historical curiosities. Other treatments from the past have more modern counterparts. Bromide sleep treatment was used in the early decades of the 20th century, as was 'artificial hibernation' with up to 72 hours of sodium pentothal-induced narcosis. This also led to deaths (Gossop, 2003). Kleber (1981) refers to the deaths of two out of ten patients treated in this way. In recent years there has been an enthusiasm for accelerated heroin detoxification under anaesthesia. Such treatments tend most often to have been provided by privately owned operated (for profit) organisations.

For many years, the traditional view of heroin dependence was extremely pessimistic about the outcome. The received wisdom suggested that people who become dependent upon heroin seldom gave up, and that treatment had little effect. An editorial in the first edition of the *International Journal of the Addictions* stated that there is no relationship between treatment and outcome and that, regardless of the treatment provided, 'the great majority of addicts simply resume drug use' (Einstein, 1966). Similarly, an early review of treatment evaluation studies noted that 'the treatment of heroin addiction has been singularly unsuccessful' (Callahan, 1980). This traditional view tended to perceive heroin use disorders in terms of an inevitable and progressive deterioration, and some natural history formulations have been more concerned to account for the deterioration of the dependent than to allow for the possibilities of recovery.

The notion that heroin use involves a progressive and irreversible deterioration is a view that finds considerable resonance with popular conceptions of substance use disorders. In its crudest form it can be found in the 'dope fiend' myth of inevitable social, moral, and physical decline. This view has been with us since at least the end of the 19th century, and it is a testimony to its staying power that a variation of this theme surfaced in the UK government anti-heroin campaign, which under the slogan '*heroin screws you up*' depicted a rapid decline in health and a loss of control over intake. A market research evaluation of the campaign showed that this led to an increased belief among young people that death was an inevitable consequence of heroin use (Gossop, 2003).

Prior to the 1970s, there was virtually no formal understanding of the addictions, and little was known about how heroin use disorders could be effectively managed or treated. During the late 1960s or early 1970s, many countries established systems of substance use disorder intervention services. Prior to this, intervention was provided by very small numbers of 'specialist' doctors, or in other types of services (mental hospitals, prisons). Differences in the governing ideas behind British and American substance use disorder policies were articulated in the 1916 Harrison Act in the United States and the 1926 Rolleston Report in the United Kingdom. The United States tended to pursue a policy that was reliant solely on control measures. The United Kingdom took a more medicalised view of the disorder and its management. These differences are still reflected in the contrast between the British acceptance of harm-reduction measures that can be utilised to limit the damage to the continuing heroin misuser, and the American goals of 'zero tolerance', 'users accountability', and a 'drug-free America' (Kleber, 1993).

When the UK drug clinics were first established (after 1968), they were almost all run by psychiatrists. Diagnoses were assigned to heroin dependent patients on an ad hoc basis after an informal clinical interview. The diagnoses were often unreliable and provided almost no useful information about aetiology, course, or treatment needs. The consequences of this were less damaging than they might have been since the intervention options available at that time were so limited. Outpatient intervention involved unsystematic forms of prescribing (it would be misleading to describe this as representing any planned or systematic programme of maintenance). Inpatient treatment intervention usually took the form of loosely organised therapeutic communities, with various 'eclectic' interventions being applied according to the clinical preferences of the staff. Behaviour therapy and biological psychiatry were disciplines that were still developing. Social and cognitive learning theories had yet to make an impact upon the field. The history of medicine suggests that the origins of treatment for any problem tend to follow the identification of severe cases and, that during its early stages of development; treatment consists of applying whatever remedies are available when the problem is first recognised. The responsibility for the treatment of newly identified problems may initially fall upon those whose interests are regarded as most closely related to the new problem but, over time, additional personnel may enter the field (Gossop, 2003).

3.2 PRIMARY THERAPEUTIC INTERVENTION MODALITIES

Recently a significantly increased emphasis on matching clients to intervention has become evident. For many heroin dependents and especially those with long and complex histories, the assessment procedure itself may be a therapeutic process. The telling of the 'life story' - some of it spontaneously, some in answer to direct questions - helps the individual, perhaps for the first time, to see his/her drug taking in some sort of perspective. The account of the present social circumstances clearly identifies

current problems and needs. This clarification to an outsider is, or can be, a clarification to the heroin abuser too and consequently what needs to be done, the way forward, becomes apparent to both (Ghodse, 1989).

Assessment is not an end in itself. There is no point in defining the problem, understanding the antecedent circumstances and merely observing and recording the adverse consequences. The aim of assessment is to offer the individual an appropriate intervention programme. Assessment should make apparent to both parties what changes are necessary, in which areas of the individual's life, and what the realistic expectations of such change are (although the heroin dependent and the professional may not always agree). The skill of the helping professional lies in the accurate assessment of the problem and the accurate matching of the heroin dependent to treatment options (Ghodse, 1989).

Six major non-pharmacological approaches to psychosocial intervention have been identified: (i) 12-step, (ii) psychodynamic, (iii) marital / family, (iv) cognitive-behavioural, (v) contingency management and (vi) motivational approaches.

Approaches based on the Alcoholics Anonymous 12-step model are still clearly dominant in the field of substance use disorder intervention, and have continued to dominate despite significant inroads from both motivational and cognitive-behavioural approaches (Rotgers *et al.*, 2003; *Alcoholics Anonymous*, 2001).

Although psychodynamic theory traditionally has not addressed itself to substance use disorders, a number of innovative approaches based in psychodynamic thinking have begun to develop in recent years. These new approaches are particularly attractive because of their potential to enhance the implementation and efficacy of other treatment approaches. In both research and clinical settings, an increased emphasis is being placed on working with clients who experience co-occurring psychiatric and substance use disorders. Because of this, psychodynamic approaches, though they were not originally developed to treat the psychopathology of substance use disorder, can provide useful ways of conceptualising and working with substance users (Aziz, 1990).

Marital and family approaches to substance use disorder intervention have a long and diverse history, and have garnered some of the strongest research evidence for their efficacy. In addition to strong research support, these approaches provide a means of integrating the apparently disparate aspects of a client's life into a more coherent treatment and support network that may help to produce and maintain changes in substance use (Rotgers *et al.*, 2003; Corsini & Wedding, 1995)

Cognitive-behavioural approaches, while not widely used clinically, have become more apparent in clinical programmes, at least in name. These approaches have amassed the strongest research support, for their efficacy, of any approaches. Cognitive-behavioural approaches are ideally suited to client-treatment matching because they are inherently orientated to the individual, with each client's treatment being potentially different in scope and process depending on the results of thorough pre-treatment and ongoing assessments (Hayes, Barlow & Nelson-Grey, 1999).

Contingency management methods are behavioural therapies that increasingly have been found to be efficacious. Originating in the theoretical ideas of B.F. Skinner, contingency management approaches

share with marital and family approaches the advantage that the client's environment is mobilised in the service of behaviour change and maintenance. Strongly supported by research evidence, contingency management treatments can be particularly effective in combination with cognitive-behavioural and 12-step components in a broad-based treatment 'package' (Rotgers *et al.*, 2003).

Motivational enhancement approaches have continued to garner both research support and clinical popularity. Perhaps the most influential development in the late 20th century substance dependence treatment intervention field, motivational enhancement approaches are now established in the mainstream of substance use disorder treatments. Based on research in social psychology and behaviour change theories, motivational enhancement approaches attempt to mobilise clients to change maladaptive behaviour to more healthful patterns. To some extent these approaches have gained popularity as a reaction against traditional confrontational approaches that focus on aggressively breaking through clients' 'denial'. Instead of aggressive confrontation, these motivational approaches take advantage of a client's ambivalence about the pros and cons of substance use in order to help produce movement toward change (Rollnick & Miller, 1995; Frykholm, 1985).

3.2.1 Assessment

Careful, detailed and thorough assessment of individuals presenting with heroin-related problems is essential if they are to receive help. The purpose of assessment is to identify the nature and severity of the heroin-related problem; to understand why it arose, to assess its consequences and to establish the strengths and weakness of the user and his/her situation. Armed with this information, it is possible to formulate and develop an intervention programme to help that individual to live a full life, integrated into society without the need for heroin (Ghodse, 1989).

While it is comparatively easy to achieve heroin withdrawal, in the sense of it being a straightforward procedure, continued abstinence presents much more long-term and challenging problems. After all, having achieved abstinence, the heroin dependent individual usually finds himself/herself in the same situation, with the same personal problems and the same personal resources - and with heroin still readily available on demand (Dos Santos & Van Staden, 2008; Dos Santos, 2006; Salter, Davies & Clark, 2006; Hopkins & Clark, 2005; McIntosh & McKeganey, 2002). Nothing will have changed except a temporary interruption of heroin administration and it is perhaps only to be expected that the same behaviour should be resumed, and often immediately. The key to staying off the drug is change - in the individual, his or her life situation or the availability of heroin (Dos Santos & Van Staden, 2008; Dos Santos, 2006; Salter *et al.*, 2006; Terry, 2003; McIntosh & McKeganey, 2002) - and the whole point of the assessment procedure is to identify areas where change can be effected so that the need for heroin or other drugs is reduced or, better still, eliminated.

It is not surprising that full assessment of the individual and all the antecedent and consequent problems is necessarily a lengthy process, and if the user is referred to a specialist drug-dependence residential unit, it usually takes a couple of weeks. During this time period the heroin dependent sees different members of the multi-disciplinary team. Their enquiries may overlap to a certain extent, but gradually a picture is created of the patient's heroin problem and how it has developed over the years, the family background, present social and financial circumstances and so on. These findings, together with the

results of laboratory tests on blood and urine, are presented at a meeting of the multi-disciplinary team during which an individual treatment plan can be worked out (Ghodse, 1989).

Accurate diagnosis of dependence status is very important. The full assessment process is described below. It is intended to serve only as a guide, to be modified according to the user's needs, the presenting problem and the resources available to the professional who is being consulted.

3.2.1.1 Heroin / drug history

The purpose of this part of the history is to determine, specifically and accurately, the user's heroin / drug-taking behaviour, both at the present time and in the past, and to establish its importance in the user's life as a whole. It must be appreciated from the beginning that the history given by the heroin dependent may be inaccurate and sometimes deliberately untruthful. The amount of heroin / drug taken may be understated, so that the apparent problem is minimised; alternatively it may be exaggerated in an attempt to get a larger dose prescribed. Illicit activity may be concealed. Truthful accounts are more likely to be obtained in a non-judgemental situation and when confidentiality is assured (Ghodse, 1989).

It is important to establish why the user is seeking help at the present time and whether any specific event has precipitated their attendance. Information should be obtained about the first exposure to heroin / drug taking, and subsequent heroin / drug taking should be similarly explored, ending up with recent patterns of abuse, including the methods and routes of drug administration. This part of the history taking may be very complicated if the user is or has been a polydrug abuser, and it is usually simplest to take each drug in turn, in chronological order of first use, and to elicit all the relevant information for each drug separately. The physical, psychological, social and legal consequences of heroin / drug use should be established and information elicited about previous attempts at seeking help as well as the other agencies with which the patient may have been in contact (Coombs, 2004).

A format for obtaining all this information is outlined in Table 3.1; it is possible to identify the main heroin / drug problem(s) for each user, to discover whether they are physically and / or psychologically dependent on drugs and to gain some idea of the severity of heroin / drug dependence. The latter may manifest in several ways, including the duration of heroin / drug abuse, the quantity of heroin / drugs taken, the amount of heroin / drug-related activity compared to other activities in their life, the route of administration and the degree and extent of risk taking.

Table 3.1 Outline of drug history scheme

* *Reason for referral*

Type of help sought

* *First exposure*

Age

Which drug

Mode of administration

Circumstances:

where

who / how initiated

source of drug

Reaction to drug

* *Subsequent use*

Which drug(s):

dose
frequency of administration
route
date and age of becoming a regular user
periods of heavy use
maximum regular amount taken
effects of drug

Reasons for continuation

Circumstances of drug taking: solitary / with friends

Preferred drug(s)

Periods of abstinence:

voluntary
enforced

* *Recent use*

Drug(s)

dose
frequency
route

Any withdrawal symptoms

Evidence of increasing tolerance; escalating dose

Source of supply

Price paid

* *Method of self-injection*

Route: subcutaneous / intramuscular / intravenous

Site

Source of injection equipment

Sharing of injection equipment

Sterilization process

* *Consequences and complications of drug use*

Physical illness: malnutrition, hepatitis, jaundice, abscesses, septicaemia, deep vein thrombosis, overdose, road traffic and other accidents, symptoms of abstinence syndrome

Mental illness: episodes of drug-induced psychosis, intoxication leading to drowsiness and confusion, dementia

Social problems: associated with drug use, amount spent weekly on drugs, source of that money

Legal problems: drug-related criminal record, any pending court cases

* *Contact with other agencies or sources of help*

Residential treatments, doctors, probation services, local authorities, community services, religious organisations, self-help groups, etc.

(Source: Ghodse, 1989)

3.2.1.2 Life history

Having explored, defined and understood the heroin and other drug taking, it is necessary to uncover all the other parts of the life history that provide essential background to the foremost problem of the heroin use disorder. Finding out about the history of the heroin dependent, about his/her environment, experiences and personality, helps to understand the whys and wherefores of heroin taking. Reaching out with understanding creates an empathy between the heroin dependent and the professional helper

that sets the basis of any future therapeutic relationship (Dos Santos, 2006; Coombs, 2004; Ghodse, 1989).

The areas of life history to be covered, as summarised in Table 3.2 below, include the family history, which should specifically explore heroin and other drug use by other members of the user's family and their knowledge of and attitude towards the individual's drug taking. Other important information should be obtained about the individual's early history and academic record and, if there is any doubt, a specific enquiry should be made about the user's ability to read and write. Employment history should also be ascertained, while marital and psychosexual history is important, as is the menstrual history of a female dependent on heroin as the drug may cause amenorrhoea and the early stages of pregnancy may not be diagnosed. It is also necessary to gain a detailed account of the user's home circumstances. An up-to-date account of their legal history should be obtained and, perhaps most important of all, the user's personality before heroin / drug taking started should be explored. Here, information from parents or other friends or relatives may be very helpful if the patient agrees to their participation in the enquiry (Coombs, 2004; Ghodse, 1989).

Table 3.2 Outline of life history scheme

* *Family history*

Age and occupation of parents and siblings (if deceased: date and cause of death, together with user's age at the time)
 Description of user's personality and their past and present attitudes towards user
 History of illness or delinquency in family members
 Drug use (including alcohol, tobacco) by other family members
 Knowledge of user's drug use by other family members, and their attitude towards it
 Relationship between various members of family

* *Early history*

Birth history
 Early development including time of milestones
 Childhood neurotic traits and periods of separation from parents
 Home life and atmosphere

* *School*

Schools attended
 Educational attainments
 Relationships with staff and peers
 Truancy
 Further education
 Vocational training

* *Employment*

Age of starting work
 Jobs held:
 dates
 duration
 wage
 job satisfaction
 reason for change

* *Marital and psychosexual history*

Date of marriage, spouse's name, age and occupation
 Children; names and ages

General marital adjustment; any periods of permanent or temporary separation
 The same information should be collected for any further marriages or cohabitations
 Partner's drug taking and knowledge of, and attitude to, user's heroin/drug taking
 Sexual inclinations and practices: masturbation, sexual fantasies, homosexuality, heterosexual experiences, contraception, sterilization

* *Menstrual history*

Age when periods started
 Length of cycle
 Dysmenorrhoea
 Premenstrual tension
 Periods of amenorrhoea
 Date of last menstrual period
 Climacteric symptoms

* *Previous illness*

Physical:
 major illness and accidents
 dates of admission to hospital
 accidental overdose
 Psychiatric
 all psychiatric admissions and treatments
 attendance at psychiatric clinics
 suicide attempts

* *Home circumstances*

Address; with whom user is living
 Present income; its source
 Financial or domestic problems

* *Legal history*

Number of arrests, court appearances, convictions
 Periods in detention centre, approved school, prison
 Periods of probation
 Nature of offences
 Outstanding court cases
 Disqualification from driving

* *Previous personality*

Interests, hobbies
 Social relations - family, friends
 Mood; mood swings
 Character; obsessiveness, ambitions, future plans
 Religious beliefs and observances

(Source: Ghodse, 1989)

3.2.1.3 Physical examination

Physical examination is an important part of the assessment procedure, permitting confirmation of details supplied in the history and sometimes providing new information. Objective signs of intoxication and withdrawal may contribute to the assessment of the physical dependence, and sequelae of heroin abuse that require medical intervention can be identified. The findings of physical examination vary according to the drug(s) of abuse and the method of their administration (Coombs, 2004).

3.2.1.4 Test for physical dependence on opiates (naloxone hydrochloride)

Physical dependence on opiates can be assessed by using the opioid antagonist naloxone hydrochloride. Naloxone 0.4-0.8 mg (1-2ml) is administered intramuscularly; this has no effect if the individual is not physically dependent on opiates. If the user is physically dependent, the signs and symptoms of the opiate abstinence syndrome will become apparent within minutes of injection. If unduly distressing, they can be relieved to some extent by giving morphine 15-30mg; the individual should then be kept under observation for a couple of hours for signs of opiate intoxication because naloxone has a shorter duration of action than morphine (Ghodse, 1989).

3.2.1.5 Mental state examination

Examination of the mental state is an essential component of the assessment procedure. Firstly, it may identify a coexistent psychiatric illness, such as depression, schizophrenia or agoraphobia that requires intervention and which may have been a contributory factor in the initiation and / or continuation of heroin / drug abuse (*American Psychiatric Association, 2000; Hertzman, 2000; Appleby, 2000; Neale, 2000; Leshner, 1999; Barlow & Durand, 1995*). In addition, because most drugs of abuse possess psychoactive properties, it is logical to seek the psychological consequences of their consumption. The skilled interpretation of psychological signs and symptoms can make a significant contribution to the assessment of a heroin/drug-dependence problem, particularly when these observations are considered in conjunction with the history of heroin / drug taking and the results of laboratory investigation. Many of the drug effects are very subtle and are not easily discernible even by experienced observers (Appleby, 2000; Neale, 2000; Brienza *et al.*, 2000; Ghodse, 1989).

3.2.1.6 Psychological assessment

Psychological assessment of the heroin dependent involves personality testing using standardised inventories to measure the user's cognitive state, personality and social functioning and to identify specific deficits. In particular, the user's suitability for different intervention options can be assessed: for example, heroin dependents suffering from overwhelming anxiety may benefit from instruction in relaxation techniques; some may require social skills and assertiveness training; others, suffering from phobias, might benefit from desensitisation. There is a wealth of psychological interventions which may be employed to reduce or eliminate the user's need for heroin, and psychological assessment aims to identify those heroin dependents to whom they may usefully be applied. In addition, psychological assessment may help to identify an individual's particular skills and aptitudes, facilitating more appropriate vocational guidance and rehabilitation (Ghodse, 1989).

3.2.1.7 Laboratory investigation

The laboratory plays an important role in the diagnosis and management of many cases of heroin dependence, often because the individuals concerned are not always truthful about their heroin consumption and an independent, objective source of information is particularly useful. However, all laboratory investigations, including tests for heroin / drugs, have their limitations and the significance of the results can only be fully appreciated if these limitations are understood, and if the results are

interpreted in the context of the information gained from the history and examination of the individual (Coombs, 2004; Ghodse, 1989).

The choice of body fluid for drug analysis depends on a number of factors that are different for each drug, but the principal consideration is the distribution of the drug between the body fluids. This varies according to the length of time the drug has been in the body and the dose. Once the drug has entered into the body, whether by the respiratory system, the alimentary canal or by injection, it circulates in the blood, either as the free drug or bound to a protein. However, to produce its action on the body, the drug must pass from the bloodstream to the body cells and it is only the free drug that can enter the body cells. The drug is rendered inactive and / or removed from the body by a variety of processes. It may be combined (conjugated) in the liver with other chemical substances and the inactive conjugate subsequently secreted in the urine. Alternatively, it may be chemically altered (often in the liver) to produce pharmacologically active metabolites, which like the parent drug may then undergo conjugation in the liver and excretion by the kidney. Damage to the liver (in hepatitis, for example) may reduce its ability to metabolise drugs. The concentration of the drug in the blood at a particular time depends on the rates of absorption and elimination. The time taken for the blood concentration to decline by 50% is known as the half-life of the drug. Drugs with a short half-life (such as heroin) will have blood levels that change rapidly with time, and that cannot easily be correlated with dose unless additional information is available (Ghodse, 1989).

Usually, urine samples are preferred for the analysis of drugs of abuse. Specimens are readily available and the concentration of a drug in urine is much higher than in blood, so that it can be detected more easily and for a longer period after drug administration. A disadvantage of using urine is that some drugs are present only as metabolites which are common to a number of parent drugs; thus the detection of a particular metabolite may not identify exactly which drug was consumed. Blood has the advantage that the parent drug can be measured, but only if the sample is collected soon after the drug was taken (Ghodse, 1989).

Nevertheless, testing for heroin usually takes place on urine samples (hair and saliva may also be used) and it is, of course, essential to be absolutely sure that the urine specimen being tested has actually come from the individual being assessed - substitution of specimens is not unknown. Clearly, a single urine specimen cannot provide all the answers related to an individual's heroin / drug taking; but repeated tests can help build up a more complete picture of heroin / drug taking over a period of time (Coombs, 2004). An additional benefit of urine testing is that it may exert a significant deterrent effect on illicit heroin / drug taking. If those attending treatment for a drug problem know that they may be asked for a urine sample, and know that a positive result will lead to adverse consequences, they may be less willing to risk illicit heroin / drug misuse. Random urine testing may help to prevent relapse (Coombs, 2004; Ghodse, 1989).

3.2.2 Therapeutic interventions

Once assessment is completed, the crucial question of how to help a particular individual with their heroin dependence problem must be answered. For some, the immediate response is pharmacological, although this is usually only a short-term measure and can only be regarded as one component of the total intervention response. A variety of therapeutic intervention options are available: some are

directed at the underlying causes which may have initiated heroin / drug taking and/or are contributing to its continuation. Some help to resolve the problems associated with or consequent from heroin / drug taking, while some deal more with the heroin/drug-taking behaviour itself, aiming to reduce or stop heroin / drug taking regardless of other problems or circumstances (Coombs, 2004; Rotgers *et al.*, 2003; Coney, 2001; Ghodse, 1989).

Not all interventions are suitable for every individual, nor are they mutually exclusive. Intervention plans must be drawn up thoughtfully, according to the needs of the individual utilising, as appropriate, a single intervention or a 'mix' of interventions, or components of different interventions. There is no one approach that is 'right' or 'best'. If there were, the problems of heroin abuse and dependence would be rapidly overcome and petty controversies between the advocates of different treatment intervention modalities would disappear. Because there are no hard and fast rules about management, much depends on the skills of professionals in developing intervention plans that meet the needs of the recovering heroin dependent, and in turn rely heavily on the findings of the assessment procedure. The key to successful intervention is to bring about change, but before this can be done, it is essential to know as much as possible about the existing situation (Ghodse, 1989). The general measures of intervention that are described in this chapter are mostly long-term measures, aimed at bringing about long-term and fundamental changes. They are often collectively described as 'rehabilitation'.

3.2.2.1 12-step programmes

A twelve-step programme is a set of guiding principles for recovery from dependence producing, compulsive or other behavioural problems, originally developed by the fellowship of Alcoholics Anonymous (AA) or from recovery from alcoholism (Van den Boss, 2007). The Twelve Steps were originally published in the first edition of *Alcoholics Anonymous* ('The Big Book') in 1939; more than 25 million copies have been printed in many languages (*Alcoholics Anonymous*, 2001). This method has been adapted as the foundation of other twelve-step programmes such as Narcotics Anonymous, Overeaters Anonymous, Co-Dependents Anonymous and Emotions Anonymous. As summarised by the American Psychological Association, working the Twelve Steps involves the following (Van den Boss, 2007):

- * recognising a greater power that can give strength;
- * examining past errors with the help of a sponsor (experienced member);
- * making amends for these errors;
- * learning to live a new life with a new code of behaviour; and
- * helping others that suffer from the same dependencies or compulsions.

The way of life outlined in the Twelve Steps has been adapted widely. The effects of Alcoholics Anonymous recovery within the family unit providing a greater quality of life resulted in fellowships such as Al-Anon; narcotic dependent people who did not relate to the specifics of alcohol dependence started meeting together as Narcotics Anonymous (*Narcotics Anonymous World Service*, 2003); similar groups were formed for sufferers of other substance dependencies. Behavioural issues such as compulsion and / or dependence with sex, food and gambling were found to be solved for some people with the daily application of the Twelve Steps in such fellowships such as Gamblers Anonymous, Overeaters Anonymous and Sexual Compulsiveness Anonymous.

Twelve-step programmes symbolically represent human structure in three dimensions: physical, mental and spiritual. The disorders and diseases the groups deal with are understood to manifest themselves in each dimension. For drug dependents and alcoholics the physical dimension is best described by the 'allergy-like bodily reactions' which result in the inability to stop using substances after the initial use. For groups not related to substance dependence the physical manifestation could be much more varied, including, but not being limited to: agoraphobia, apathy, distractibility, forgetfulness, hyperactivity, hypomania, insomnia, irritability, lack of motivation, laziness, mania, panic attacks, poor impulse control, procrastination, self-injury, suicide attempts and stress. The illness of the spiritual dimension, in all twelve-step groups / programmes, is considered to be self-centeredness. This model is not intended to be a scientific explanation: it is only a perspective that twelve-step organisations have found useful (Ronel, 2000; Kurtz & Chambon, 1987).

The process is intended to replace self-centeredness with a growing moral consciousness and willingness for self-sacrifice and unselfish constructive actions (Ronel, 2000). In twelve-step groups, this is known as a spiritual awakening or religious experience. This should not be confused with abreaction, which quickly produces dramatic, but ephemeral, changes (Marmor, 1980). In twelve-step groups / programmes, 'spiritual awakening' is believed to develop, most frequently, slowly over a period of time (*Alcoholics Anonymous*, 1976). In accordance with the First Step, twelve-step groups / programmes emphasise admission by oneself of a drug problem. The only requirement for membership is a desire to stop drugging (*Narcotics Anonymous*, 2001).

In twelve-step programmes, a sponsor is a more experienced person in recovery who guides the less-experienced aspirants ('sponsee' or variously, 'sponsee') through the programme. Newcomers in twelve-step programmes are encouraged to secure a relationship with at least one sponsor. Sponsorship is a 'one on one' relationship of shared experiences focused on working the Twelve Steps (*Narcotics Anonymous World Service*, 2001).

Sponsors and sponsees participate in activities that lead to spiritual growth as defined by the Twelve Step Process. These may include practices such as literature discussion and study, meditation, and writing. Completing the Twelve Steps implies being competent to sponsor to newcomers in recovery (*Alcoholics Anonymous*, 1976). Sponsees typically carry out their Fifth Step with their sponsor. The Fifth Step, as well as the Ninth Step, have been compared to confession and penitence. Many, such as Michel Foucault, noted that such practices evoke intrinsic modifications in the person - exonerating, redeeming and purifying them, which unburdens them of their wrongs, liberates them and promises their salvation (Kitz, 2002). The personal nature of the behavioural issues that lead to seeking help in twelve-step fellowships results in a strong relationship between sponsee and sponsor. As the relationship is based on spiritual principles, it is unique and not generally characterised as 'friendship'. Fundamentally, the sponsor has the single purpose of helping the sponsee recover from the behavioural problem that brought the sufferer into twelve-step work, which reflexively helps the sponsor recover (*Alcoholics Anonymous World Service*, 2001).

The criticisms of twelve-step groups / programmes are varied. People have attended twelve-step groups / programmes, only to find success elude them. Their varied success rates, and the belief in a Higher Power suggested in them, are common criticisms of their universal applicability and efficacy (Coleman, 2002; Kohn, 1987).

3.2.2.2 Psychodynamic intervention

Psychodynamic psychotherapy is a form of depth psychology, the primary focus of which is to reveal the unconscious content of a heroin dependent's psyche in an effort to alleviate psychic tension (Aziz, 1990). In this way, it is similar to psychoanalysis; however, psychodynamic therapy tends to be briefer and less intensive than psychoanalysis, and also relies more on the interpersonal relationship between the heroin dependent and therapist than do other forms of depth psychology. In terms of approach, this form of therapy also tends to be more eclectic than others, adopting techniques from a variety of sources, rather than relying on a single system of intervention. It is a focus that has been used in individual psychotherapy, group psychotherapy, family therapy, and in order to understand and work with institutional and organisational contexts (Aziz, 2007; Coney, 2001).

The principles of psychodynamics were first introduced in the 1874 publication *Lectures in Physiology* by German scientist Ernst von Brücke. Von Brücke, taking his cue from thermodynamics, suggested that all living organisms are energy systems, governed by the principle of energy conservations. During the same year, Von Brücke was a supervisor of first-year medical student Sigmund Freud at the University of Vienna. Freud later adopted the new construct of 'dynamic' physiology to aid in his own conceptualisation of the human psyche. Later, both the concept and application of psychodynamics were further developed by the likes of Carl Jung, Alfred Adler and Melanie Klein (Aziz, 2007).

Most psychodynamic approaches are centred on the idea that some maladaptive functioning is in play, and that this maladaptation is, at least in part, unconscious. The presumed maladaptation develops early in life, and it is posited that in later years the client will begin to feel some dissonance in their day to day lives as a function of this paradigm. The psychodynamic therapist first intervenes to treat the discomfort associated with the poorly formed function, and then assists the heroin dependent to acknowledge the existence of the maladaptation, while working to develop strategies for change (Aziz, 2007; Aziz, 1990).

Psychodynamic psychotherapy demands considerable introspection and reflection on the part of the heroin dependent. It also relies on the person's desire to be helped to support its effectiveness, as well as their willingness to reveal themselves, and their level of insight. Consequently, the heroin dependent must possess enough resilience and ego strength to manage the strong emotions this form of therapy may provoke (Benard, 2004).

3.2.2.3 Family / marital intervention

Family therapy is both a theory and a treatment method. It offers a way to view heroin use disorders and clinical problems within the context of a family's transactional patterns. It also represents a form of intervention in which members of a family or couple are assisted to identify and change problematic, maladaptive, self-defeating, and repetitive relationship patterns. Unlike individually focused therapies, in family therapy the identified patient (the family member considered to be the problem in the family) is viewed as a symptom bearer, expressing the family's disequilibrium or current dysfunction. The family system itself is the primary unit of treatment and not the identified patient. Helping families and couples to change leads to the improved functioning of individuals as well as families (Corsini & Wedding, 1995).

Some form of family intervention is now standard for both residential and outpatient treatment of substance use disorders. A successful outcome for intervention is related to family stability and support (Donoghoe, Dorn, James, Jones, Ribbens, South, 1997; Sheridan, 1994; Sandoz, 1991; Gleeson, 1991). Family intervention is particularly effective when a) individual psychotherapy is ineffective; b) the dependence affects the family / marriage; c) in cases of severe psychopathology; d) when depression is present. An assumption underlying family intervention is that after a period of time a person's dependence-related behaviour evokes negative emotion and behaviour on the part of family members, thus leading to family dysfunction. Therefore, intervention strategies are introduced that allow family members to come to grips with their own interactional patterns. Structural and strategic approaches are used, as well as assertiveness training, rehearsal, contracting, and education with respect to addictive behaviour (Schauffer, 1998; Sheridan, 1994; L'Abate, Farrar & Serritella, 1992).

3.2.2.4 Cognitive Behavioural Therapy

Cognitive Behavioural Therapy (CBT) is a psychotherapy based on modifying cognitions, assumptions, beliefs and behaviours, with the aim of influencing disturbed emotions. *Thoughts* influence *feelings* and *behaviour*, *feeling* influence *behaviour* and *behaviours* influence *emotions* and *thoughts*. These modalities are therefore interrelated, and change in one modality will in all probability influence at least one of the others (Ellis, 2001). CBT is an 'active, directive, time-limited treatment' that focuses on identifying and understanding the relationship between underlying 'automatic' thinking and attitudes on the one hand and problematic feelings and behaviours on the other. Recovering heroin dependents can learn, with the help of a psychotherapist, to correct negatively biased attitudes and beliefs about themselves and the world about them, and employing a more realistic perception of themselves and their future, learn to cope without heroin (Ghodse, 1989)

The general approach was developed out of behaviour modifications, CBT and Rational Emotive Therapy, and has become widely used to treat various kinds of neurosis and psychopathology, including substance dependence, mood disorders and anxiety disorders. The particular therapeutic techniques vary according to the particular kind of client or issue, but commonly include keeping a diary of significant events and associated feelings, thoughts and behaviours, questioning and testing cognitions, assumptions, evaluations and beliefs that might be unhelpful and unrealistic, gradually facing activates which may have been avoided, and trying out new ways of behaving and reacting. Relaxation and distraction techniques are also commonly included. CBT is widely accepted as an evidence and empirically based, cost-effective psychotherapy for substance dependents. It is sometimes used with groups of people as well as individuals, and the techniques are also commonly adapted for self-help manuals and increasingly, for self-help software packages (Corsini & Wedding, 1995).

The objectives of CBT typically are to identify irrational or maladaptive thoughts, assumptions and beliefs that are related to debilitating negative emotions and behaviours, and to identify how they are dysfunctional, inaccurate, or simply not helpful. This is done in an effort to reject the distorted cognitions and to replace them with more realistic and self-helping alternatives (Corsini & Wedding, 1995).

CBT is not an overnight process. Even after patients have learned to recognise when and where their mental processes go awry, it can take months of concerted effort to replace any dysfunctional cognitive-affective-behavioural process or habit with a more reasonable, salutary one. The cognitive model

especially emphasised by Aaron Beck's cognitive therapy holds that a person's core beliefs (often formed in childhood) contribute to 'automatic thoughts' that pop up in every day life in response to situations (Corsini & Wedding, 1995).

CBT can be perceived as an umbrella term for many different therapies that share some common elements. While similar views of emotion have existed for millennia, the earliest form of CBT was developed by Albert Ellis (1913 - 2007) in the early 1950s. Ellis eventually called his approach Rational Emotive Behaviour Therapy, or REBT, as a reaction against popular psychoanalytic methods at the time (Ellis, 2001). Aaron T. Beck independently developed another CBT approach, called Cognitive Therapy, in the 1960s (Beck, 1975). Cognitive Therapy rapidly became a favourite intervention for the purpose of studying psychotherapy research in academic settings. In initial studies, it was often contrasted with behavioural treatments to establish which was more effective. However, in recent years, cognitive and behavioural techniques have often been combined into cognitive behavioural treatment. This is arguably the primary type of psychological treatment being studied in research today (Corsini & Wedding, 1995; Ghodse, 1989).

Concurrent to the pioneering contributions of Ellis and Beck, starting in the late 1950s and continuing through the 1970s, Arnold A. Lazarus developed what was arguably the first form of 'Broad-Spectrum' Cognitive-Behaviour Therapy. Indeed, in 1958, Lazarus was the first person to introduce the terms 'behaviour therapy' and 'behaviour therapist' into the professional literature (Lazarus, 1958). He later broadened the focus of behavioural treatment to incorporate cognitive aspects. When it became clear that optimising therapy's effectiveness and effecting durable treatment outcomes often required transcending more narrow focused cognitive and behavioural methods, Lazarus expanded the scope of CBT to include physical sensations (as distinct from emotional states), visual images (as distinct from language-based thinking), interpersonal relationships and biological factors. The final product to Lazarus' approach to psychotherapy is called Multimodal Therapy and is, perhaps, the most comprehensive form of CBT, in addition to REBT that also shares many of the same assumptions and theorising (Lazarus, 1971).

CBT boasts a sound evidence base in terms of its effectiveness in reducing symptoms and preventing relapse. It has been clinically demonstrated in over 400 studies to be effective for many psychiatric disorders and medical problems for both children and adolescents. CBT most closely allies with the Scientist-Practitioner Model of Clinical Psychology, in which clinical practice and research is informed by a scientific perspective, clear operationalisation of the 'problem' or 'issue', an emphasis on measurement (and measurable change in cognition and behaviour), and measurable goal-attainment. Cognitive Behavioural Group Therapy (CBGT) is a similar approach to treating mental illnesses, based on the protocol of Richard Heimberg. In this case, clients participate in group therapy and recognise that they are not alone in suffering from their problems (Hayes *et al.*, 1999).

3.2.2.5 Contingency management

Contingency management is a behavioural procedure based on the principle of encouraging previously agreed behaviour patterns by offering rewards (positive reinforcers) when they occur, and by punishing the individual if they do not, or if other undesirable behaviour patterns occur. In other words, specified rewards and privileges become contingent upon continuation of agreed behaviour. The key to

successful contingency management is for the psychotherapist to control appropriate positive reinforcers. Where a heroin dependent individual attends a clinic regularly and frequently for a prescription for methadone (or another opiate medication), a variety of reinforcers can be utilised for the purpose of contingency management: for example, methadone take-home privileges (rather than having to take the methadone under supervision at the clinic), frequency of clinic attendance, time of appointment, access to counselling and other 'helping' services, and advantageous holiday arrangements can be offered contingent upon certain behaviours. In practice, similar 'rewards' are often given for good behaviour, but in a non-contingent way, for example, an individual can ask for special arrangements to be made for opiate prescription while they are 'doing well', that is, attending regularly with no evidence of illicit drug abuse, etcetera. Planned contingency management, however, means that drug abusers learn much more directly and therefore more easily and more quickly, exactly what is expected of them (Rotgers *et al.*, 2003; Ghodse, 1989).

Although contingency management is theoretically simple, there are certain practical problems peculiar to its application to the treatment of heroin use disorders. It is often difficult to discover quickly whether individuals have been abusing heroin because the results of urine tests may not be available for several days or even a week or more. The inevitable delay before contingent measures can be implemented impairs their efficacy. However, the use of positive reinforcement, as well as therapeutically effecting individuals, may also have a wider effect on the social and therapeutic atmosphere of the whole clinic by reducing confrontation between staff and patients. Relationships between staff and patients at such clinics are often difficult - patients are often manipulative and threatening in their attempt to obtain their drug of abuse or larger quantities of it, and the staff, frustrated and disheartened by recidivism, develop a coercive appointment, far from being a therapeutic occasion, into becoming little more than a time for bargaining about a prescription (Ghodse, 1989).

The deliberate adoption of contingency management procedures assists individuals to achieve defined and realistic goals for which they can be rewarded, rather than being punished all the time for failure to make progress towards undefined targets. Equally, positive and non-punitive attitudes on the part of the staff are more likely to attract patients to treatment and to retain them in it. Many clinics already lay down rules which effectively act as contingencies to control behaviour, though if they are not applied systematically, maximum benefit is not achieved (Rotgers *et al.*, 2003).

It is suggested that contingency management procedures are little more than 'training' and that their efficacy lapses when contingent rewards and punishments are discontinued. Undoubtedly, undesirable patterns of behaviour, including heroin use, may recur when treatment stops, but this should be seen as yet another instance of relapse due to the severity of heroin dependence and not necessarily as a failure of intervention. Contingency management, carried out in a systematic and comprehensive way, provides a firm and consistent structure for the heroin dependents life and it may represent the first time, or the first time for a long while, that he or she has experienced this. It provides the recovering heroin dependent with the opportunity to learn the boundaries of acceptable behaviour, and even if relapse occurs the learning experience will not have been wasted. One way of improving the long-term efficacy of contingency management is to include family because they may have in their control many social and material reinforcers, which can be made contingent on desired behaviour long after the individual has stopped attending hospitals and clinics (Rotgers *et al.*, 2003; Ghodse, 1989).

3.2.2.6 Motivational approaches

The concept of motivational interviewing evolved from experience in the treatment of problem drinkers, and was first described by Miller (1983) in an article published in *Behavioural Psychotherapy*. These fundamental concepts and approaches were later elaborated by Miller and Rollnick (1991) in a more detailed description of clinical procedures. A noteworthy omission from both of these documents, however, was a clear definition of motivational interviewing.

Any innovation tends to be diluted and changed with diffusion. Furthermore, some approaches being delivered under the name of motivational interviewing bear little resemblance to the understanding of its essence, and indeed in some cases directly violate its central characteristics (Kuchipudi, Hobein, Fleckinger & Iber, 1990). Motivational interviewing is a directive, client-centred counselling style for eliciting behaviour change by helping heroin dependents to explore and resolve ambivalence. Compared with nondirective counselling, it is more focused and goal-directed. The examination and resolution of ambivalence is its central purpose, and the psychotherapist is intentionally directive in pursuing this goal (Rollnick & Miller, 1995).

Motivation to change is elicited from the heroin dependent, and not imposed from without. Other motivational approaches have emphasised coercion, persuasion, constructive confrontation, and the use of external contingencies (for example, the threatened loss of job or family). Such strategies may have their place in evoking change, but they are quite different in spirit from motivational interviewing, which relies upon identifying and mobilising the heroin dependent's intrinsic values and goals to stimulate behaviour change (Rollnick & Miller, 1995).

It is the heroin dependent's task, not the psychotherapist's, to articulate and resolve his or her ambivalence. Ambivalence takes the form of a conflict between two courses of action (for example, indulgence versus restraint), associated with each of which are perceived benefits and costs. Many heroin dependents have never been given the opportunity of expressing the often confusing, contradictory and uniquely personal elements of this conflict. The psychotherapist's task is to facilitate expression of both sides of the ambivalence impasse, and guide the heroin dependent toward an acceptable resolution that triggers change (Rollnick & Miller, 1995; Rollnick, Kinnersley, & Stott, 1993; Rollnick, Heather & Bell, 1992).

Direct persuasion is not an effective method for resolving ambivalence. It is tempting to try to be 'helpful' by persuading the heroin dependent of the urgency of the problem about the benefits of change. It is fairly clear; however, that these tactics generally increase the person's resistance and diminish the probability of change (Miller, Benefield & Tonigan, 1993; Miller & Rollnick, 1991; Miller, 1985).

The therapeutic style is generally a quiet and eliciting one. Direct persuasion, aggressive confrontation, and argumentation are the conceptual opposite of motivational interviewing and are explicitly proscribed in this approach. To a psychotherapist accustomed to confronting and giving advice, motivational interviewing can appear to be a hopelessly slow and passive process. The proof is in the outcome. More aggressive strategies, sometimes guided by a desire to 'confront client denial', easily slip into driving heroin dependents to make changes for which they are not ready (Rollnick & Miller, 1995).

The psychotherapist is directive in helping the heroin dependent to examine and resolve ambivalence. Motivational interviewing involves no training of such dependents in behavioural coping skills, although the two approaches are not incompatible. The operational assumption in motivational interviewing is that ambivalence or lack of resolve is the principal obstacle to be overcome in triggering change. Once this has been accomplished, there may or may not be a need for further intervention such as skill training. The specific strategies of motivational interviewing are designed to elicit, clarify, and resolve ambivalence in a client-centred and respectful therapeutic atmosphere (Rollnick & Miller, 1995).

Readiness to change is not a client trait, but a fluctuating product of interpersonal interaction. The psychotherapist is therefore highly attentive and responsive to the heroin dependent's motivational signs. Resistance and 'denial' are perceived not as client traits, but as feedback regarding the psychotherapist's behaviour. Resistance is often a signal that the psychotherapist is assuming greater readiness to change than is the case, and it is a cue that the psychotherapist needs to modify motivational strategies. The therapeutic relationship is more like a partnership or companionship than one involving expert / recipient roles. The psychotherapist respects the client's autonomy and freedom of choice (and consequences) regarding his or her own behaviour (Rollnick & Miller, 1995). Viewed in this way, it is inappropriate to think of motivational interviewing as a technique or set of techniques that are applied to or (worse) 'used on' people. Rather, it is an interpersonal style, not at all restricted to formal therapeutic settings. It is a subtle balance of directive and client-centred components, shaped by a guiding philosophy and understanding of what triggers change. If it becomes a trick or a manipulative technique, its essence has been lost (Miller, 1994).

There are, nevertheless, specific and trainable psychotherapist behaviours that are characteristic of a motivational interviewing style. Foremost among these are:

- * seeking to understand the heroin dependent's frame of reference, particularly via reflective listening;
- * expressing acceptance and affirmation;
- * eliciting and selectively reinforcing the heroin dependent's own self motivational statements expressions of problem recognition, concern, desire and intention to change, and ability to change;
- * monitoring the heroin dependent's degree of readiness to change, and ensuring that resistance is not generated by jumping ahead of the client; and
- * affirming the heroin dependent's freedom of choice and self-direction.

A number of specific intervention methods have been derived from motivational interviewing. The Drinker's Check-up (Miller, Sovereign & Kreege, 1988) is an assessment-based strategy developed as a brief contact intervention with problem drinking. It involves a comprehensive assessment of the alcohol dependent's drinking and related behaviours, followed by systematic feedback, to the client, of findings (the check-up strategy can be and has been adapted to other problem areas, such as heroin dependence, as well). The key is to provide meaningful personal feedback that can be compared with some normative reference. Motivational interviewing is the style in which this feedback is delivered. It is quite possible, however, to offer motivational interviewing without formal assessment of any kind. It is also possible to provide assessment feedback without any interpersonal interaction such as motivational

interviewing (for example, by mail), and there is evidence that even such feedback can itself trigger behaviour change (Agostinelli, Brown & Miller, 1995).

Brief intervention in general has been confused with motivational interviewing, helped perhaps by the introduction of more generic terms such as 'brief motivational counselling'. Such brief interventions, as focused on drugging, have been offered to two broad client groups: heavy heroin users in general medical settings who have not asked for help, and help-seeking problem heroin users in specialist settings (Bien, Miller & Boroughs, 1993). Attempts to understand the generally demonstrated effectiveness of brief intervention have pointed to common underlying ingredients, one expression of which is found in the acronym FRAMES, originally devised by Miller and Sanchez (1994). The letters of FRAMES refer to the use of Feedback, Responsibility for change lying with the individual, Advice-giving, providing a Menu of change options, an Empathic counselling style, and the enhancement of Self-efficacy (Bien *et al.*, 1993; Miller & Rollnick, 1991). Although many of these ingredients are clearly congruent with a motivational interviewing style, some applications (for example, that of advice-giving) are not (Rollnick, Kinnerley & Stott, 1993). Therefore motivational interviewing ought not to be confused with brief interventions in general. The word 'motivational' should only be used when there is a primary intentional focus on increasing readiness for change. Further, 'motivational interviewing' should be employed only when careful attention has been paid to the definition and characteristic spirit described above. Put simply, if direct persuasion, appeals to professional authority, and directive advice-giving are part of the (brief) intervention, a description of the approach as 'motivational interviewing' is inappropriate. It should also be useful to distinguish between explanations of the mechanisms by which brief interventions work (which might or might not involve motivational processes) and specific methods, derived from motivational interviewing, which are designed to encourage behaviour change (Rollnick & Miller, 1995).

3.3 PRIMARY PHARMACOLOGICAL INTERVENTIONS

The United Kingdom Department of Health's Rolleston Committee report in 1926 established the British approach to the prescription of heroin to users, which was maintained for the next forty years: dealers were prosecuted, but doctors could prescribe heroin to users when withdrawing from it would cause harm or severe distress to the patient. This 'policing and prescribing' policy effectively controlled the perceived heroin problem in the UK until the 1960's. Attitudes eventually began to change; however, in 1964 only specialised clinics and selected approved doctors were allowed to prescribe heroin to users. Eventually, from the 1970s, the emphasis shifted to abstinence and the prescription of methadone; until now only a small number of users in the UK have been prescribed heroin (Goldacre, 1998).

In 1994 Switzerland began a trial programme featuring a heroin prescription for users not well suited for withdrawal programmes, for example those who had failed multiple withdrawal programmes. The aim is to maintain the health of the user in order to avoid medical problems stemming from low-quality street heroin. Reducing heroin-related crime was another goal. Heroin users can more easily find or maintain a paid job through the programme as well. The first trial in 1994 began with 340 users but it was later expanded to 1000 after medical and social studies suggested its continuation. Participants are prescribed to heroin, injected in specially designed pharmacies for about US\$13 per dose. The success of the Swiss trials led German, Dutch, and Canadian cities to have trials of legal supervised injecting centers, in line with other harm reduction programmes. Some Australian cities (such as Sydney) have

trialed legal heroin supervised injecting centres, in line with other harm reduction programmes. Heroin is unavailable on prescription however, and remains illegal outside the injecting rooms, but is effectively decriminalised inside of the injecting room (Nadelmann, 1995).

Two approaches are generally available to ease the physical withdrawal from heroin. The first is to substitute a longer-acting opiate such as methadone or buprenorphine for heroin or another short-acting opiate and then slowly taper the dose off. In the second approach, benzodiazepines such as diazepam (Valium) may temporarily ease the often extreme anxiety of opioid withdrawal. The most common benzodiazepine employed as part of the detoxification protocol in these situation is oxazepam (Serepax). Benzodiazepine use must be prescribed with care because benzodiazepines have a dependence producing potential, and many opiate users also use other central nervous system depressants, especially alcohol (*Department of Health, The Scottish Office Department of Health, Welsh Office, Department of Health and Social Services, Northern Ireland, 1999*). Also, though unpleasant, opiate withdrawal seldom has the potential to be fatal, whereas complications related to withdrawal from benzodiazepines, barbiturates and alcohol (such as epileptic seizures, cardiac arrest, and delirium tremens) can prove hazardous and potentially fatal (Leggett, 2001; Gossop, 2000; Kenny, 1999; Pearson, 1987; Kohn, 1987; Kaplan, 1983).

Many symptoms of heroin withdrawal are due to rebound hyperactivity of the sympathetic nervous system, with can be suppressed by clonidine, a centrally-acting alpha-2 agonist primarily used to treat hypertension (Carnwath & Hardman, 1998). Another drug sometime used to relieve the 'restless leg' symptom of withdrawal is baclofen, a muscle relaxant. Diarrohea can likewise be treated symptomatically with the peripherally active opiate drug loperamide (Imodium) (*Department of Health, The Scottish Office Department of Health, Welsh Office, Department of Health and Social Services, Northern Ireland, 1999*).

Buprenorphine is one of the substances most recently licensed for the substitution of opiates in the treatment of users. Being a partial opiate agonist / antagonist, it develops a lower grade tolerance than heroin or methadone due to the so-called ceiling effect. It also causes less severe withdrawal symptoms than heroin when discontinued abruptly, which should never be undertaken without proper medical supervision. It is usually administered every 24-48 hrs. Buprenorphine is a kappa-opioid receptor antagonist. This gives the drug an anti-depressant effect, increasing physical and intellectual activity. Buprenorphine also acts as a partial agonist at the same μ -receptor where opiates like heroin exhibit their action. Due to its effects on this receptor, all patients whose tolerance is above a certain level are unable to obtain any 'high' from other opiates during buprenorphine treatment except for very large doses (Lintzeris, Bell, Bammer, Jolley, & Rushworth, 2002; Fisher, Johnson, Eder, Jagsch, Peterzell, Weninger, Langer & Aschauer, 2000). Researchers at the Johns Hopkins University have been testing a sustained-release 'depot' form of buprenorphine that can relieve craving and withdrawal symptoms for up to six weeks (Thomas, 2001). A sustained-release formulation would allow for easier administration and adherence to treatment, and reduce the risk of diversion or misuse.

Methadone, as mentioned earlier in the chapter, is another μ -opioid agonist often used to substitute for heroin in the treatment of heroin dependence. Compared to heroin, methadone is well (but slowly) absorbed by the gastrointestinal tract and had a much longer duration of action, approximately 24 hours. Thus methadone maintenance avoids the rapid cycling between intoxication and withdrawal associated

with heroin dependence. In this way, methadone has demonstrated some success as a 'less harmful substitute'; despite exhibiting about the same dependence potential as heroin, it is recommended for those who have repeatedly failed to complete withdrawal or have recently relapsed. As of 2005, the μ -opioid agonist buprenorphine is also being used to manage heroin dependence, being a superior, though still not perfect alternative to methadone. Methadone, since it is longer-acting, produces withdrawal symptoms that can be more intense and can appear later than with heroin, and usually last considerably longer. Methadone withdrawal symptoms can potentially persist for over a month, compared to heroin where significant physical symptoms subside in four days (Sakol, Stark & Sykes, 1989).

Three opiate antagonists are known: naloxone and the longer-acting naltrexone and nalmefene. These medications block the effects of heroin, as well as of the other opiates at the receptor site. Studies have suggested that naltrexone may improve the success rate in treatment programmes when combined with traditional therapy (Gonzalez & Brogden, 1988).

Apomorphine is a type of dopaminergic agonist, a morphine derivative, but does not actually contain morphine, or bind to opiate receptors. It is a relatively non-selective dopamine receptor agonist, having possible slightly higher affinity for D_2 -like dopamine receptors (Battaglia, Gesi, Lenzi, Busceti, Soldani, Orzi, Rampello, Nicoletti, Ruggieri & Fornai, 2002; Casas, Guardia, Prat & Trujols, 1995). Historically, apomorphine has been tried for a variety of uses including psychiatric treatment of homosexuality in the early 20th century. Currently, apomorphine is used in the treatment of Parkinson's disease and (under the name Uprima) erectile dysfunction. It was also successfully used in the treatment of heroin dependence, a purpose for which it was championed by the American beat generation author William S Burroughs. It is a potent emetic (that induces vomiting), meaning it should not be administered without an antiemetic such as a domperidone. David Beresford (2002), a journalist from *The Guardian*, writes about an 'unfinished story' - the curious story of apomorphine. In the 1930s a doctor specialising in substance use disorders, John Yerbery Dent, discovered that a seemingly separate attribute of the drug from its emetic quality was its ability to ameliorate opiate withdrawal symptoms. The drug seemed to remove the craving from opiate dependence and took the fear out of going 'cold turkey'. William Burroughs was successfully treated for his heroin dependence by Dent with the help of apomorphine, but the treatment never caught on. Confusion with its use in aversion therapy could have contributed to its lack of popularity. Burroughs himself claimed the drug was the victim of a conspiracy among the US law enforcement agencies and pharmaceutical companies (Beresford, 2002).

There is also a controversial treatment for heroin dependence based on an Iboga-derived African drug, ibogaine. Ibogaine treatments are said to interrupt substance use disorders for 3-6 months or more in up to 80% of patients (Lotsof, 1995). A relapse may occur when the person returns home to their normal environment, however, where drug seeking behaviour may return in response to social and environmental cues. Ibogaine treatments are carried out in several countries including Mexico and Canada, as well as in South and Central American and Europe. Opiate withdrawal therapy is the most common use of Ibogaine. Some patients find ibogaine therapy more effective when it is given several times over the course of a few months or years. A synthetic derivative of ibogaine, 18-methoxycoronaridine was specifically designed to overcome cardiac and neurotoxic effects seen in some ibogaine research, but the drug has not yet found its way into clinical research (Glick, 1996).

3.4 RESTORATIVE JUSTICE / DIVERSION PROGRAMMES

Restorative justice is a theory of justice that relies on reconciliation rather than punishment. The theory relies on the idea that a well-functioning society operates with a balance of rights and responsibilities. When an incident occurs which upsets that balance, such as heroin related crime, methods must be found to restore the balance, so that members of the community, the victim, and offender, can come to terms with the incident and carry on with their lives. In order for this to occur, the offender must accept responsibility for the fact that his or her behaviour has caused harm to the victim, and the victim must be prepared to negotiate and accept restitution or compensation for the offender's wrongdoing. In essence, restorative justice aims as far as possible to 'put right the wrong'. It is based on the idea that we are all connected, that crime is a violation of relationships, and that such violations create obligations (*Restorative Justice Centre: An introduction, 2005; Department of Social Development, 2003 a*).

Although formal restorative justice programmes were first introduced in countries such as Australia and New Zealand, restorative justice concepts are certainly not new to South Africa. In many South African communities, the way of dealing with youth has traditionally included mechanisms that encourage youth to take responsibility for their actions, which includes outcomes such as an apology, restitution and reparation, and restoring relationships between offender and victim. In addition, where a community is involved, meetings are held publicly so as to provide everyone with a sense of ownership in the process. This is still evident in the way traditional courts function and the principles they uphold. Offenders in most cases are not separated from their support system of family and close relatives, and those closest to offenders hold them responsible. In other words, concepts that have now been labeled restorative justice have been in use in South African communities for some time (*Department of Social Development, 2003 a*).

Victim-offender mediations and family group conferences are two formal types of restorative justice programmes mentioned in the Child Justice Bill. But restorative justice is not limited to these programmes. Restorative justice can embrace any other programme using restorative justice concepts. There is the concern that young offenders (under the age of 18) who enter the official criminal justice system will be disadvantaged for the rest of their lives and become more likely to resort to criminal activities in the future. It is hoped that by intervening with suitable skills and interpersonal training early on, this track can be avoided. Diversion is closely linked to the idea of restorative justice. It aims to make the youth understand the impact of their crimes, for example heroin dependence related crime, on others and to make sure that they put right what they have done wrong. This is done by providing specific interventions like guidance programmes for the youth concerned, and by helping families and the community to learn how to guide youth better in their decisions (*Restorative Justice Centre: An introduction, 2005; Department of Social Development, 2003 b*).

A diversion order may include an order to complete any number of diversion programmes (such as drug rehabilitation programmes) available. These programmes are run by the provincial Department of Social Development and non-governmental / non-profit organisations like NICRO. A probation officer must assess the individual who has been arrested and, if the offender is a suitable candidate for diversion, make this recommendation at a preliminary inquiry. If the latter is given a diversion order, the officer is responsible for making sure that the offender adheres to it. If the offender fails to comply with

any condition of a diversion option, it is the probation officer's duty to inform the inquiry magistrate (*Department of Social Development, 2003 b*).

3.5 NEEDLE EXCHANGE PROGRAMMES

Needle exchange programmes are often regarded as a controversial social policy, based on the philosophy of harm reduction where injecting heroin users can obtain hypodermic needles and associated injection equipment at little or no cost. These programmes are called 'exchanges' because many require exchanging used needles for an equal number of new needles. In addition to sterile needles, syringe exchange programmes typically provide other services such as HIV and hepatitis C testing, alcohol swabs, bleach and sterile water, aluminium 'cookers', containers for needles and many other items. Government resistance to these programmes is strong, because they are sometimes believed to encourage non-injectors to use drugs, even though there is no evidence for this. Public objection to such initiatives, especially in more conservative countries, has at times been heated (Ritter & Cameron, 2006).

In the United States approximately a fifth of all new HIV infections and the majority of hepatitis C infections are the result of injection drug use (*Center for Disease Control and Prevention, 2005*). The National Institute of Health (2002) estimates that in the United States between 15%-20% of injection drug users suffer from HIV and at least 70% have hepatitis. The presence of needle exchange programmes have been attributed to a reduction in high-risk injection by up to 74%. Studies have proved such programmes to be effective at preventing the spread of HIV and hepatitis (Rich, McKenzie, Macalino, Taylor, Sanford-Colby, Wolf, McNamara, Mehrotra & Stein, 2004; Des Jarlais, McKnight & Milliken, 2004; Bastos & Strathdee, 2000; Drucker, Lurie, Wodak & Alcabes, 1998; Lurie & Drucker, 1997; Des Jarlais, Marmor, Paone, Titus, Shi, Perlis, Jose & Friedman, 1996).

Needle-exchange programmes can be traced back to informal activities undertaken during the 1970s; however the idea is likely to have been discovered a number of times in different locations. The first identifiable needle distribution service was undertaken by a private pharmacist in Scotland (1982-1984). The first government-approved initiative was undertaken in the early to mid 1980s, with other initiatives following closely. While the initial Dutch programme was motivated by concerns regarding an outbreak of hepatitis A, the AIDS pandemic motivated the rapid adoption of these programmes around the world (Ritter & Cameron, 2006). This reflects the pragmatic response to the pandemic which is undertaken by some governments, and is encapsulated in the harm reduction / minimisation philosophy.

The provision of needle exchange therefore offers a social benefit in reducing health costs and also provides a means to dispose of used needles in a safe manner. The programmes in Australia are credited with maintaining a very low rate of HIV infections among drug users. These benefits have led to an expansion of such programmes in most jurisdictions that have introduced them, aiming to increase geographical coverage, but also the availability of these services after hours. Vending machines which automatically dispense injecting equipment 'packs' have been successfully introduced in a number of locations (McDonald, 2006).

Other benefits of these programmes include being a first point of contact for drug treatment (Broner, Kidorf, King, Beilenson, Svikis & Vlahov, 1998), access to health and counselling service referrals, the

provision of up-to-date information about safe injecting practices, and as a means for the collection of data from injecting drug users about their behaviour and/or drug use patterns (*Minnesota AIDS Project*, 1995). Counties where these programmes exist include: Australia, Brazil, Canada, The Netherlands, New Zealand, Portugal, Spain, Switzerland, United Kingdom, Islamic Republic of Iran, and the United States; however in the United States such programmes may not receive federal funding.

The provision of needle-exchange programmes is opposed by certain groups on a wide range of grounds, which include:

- * the programmes represent a weakening on the 'war on drugs' (or equivalent) policy;
- * encouragement of drug use;
- * the services attract crime to the area;
- * the location of such services may lower surrounding property values;
- * that there will be an increase in discarded injecting equipment around the service; and/or
- * the services build and/or strengthen social networks of injectors and undermine treatment or diversion.

Each of these concerns possess varying degrees of validity, though a number of meta-analyses of studies from around the world yield mixed results. European studies have found that the provision of needles does not cause a rise in drug use (Laurence, 2007). Paradoxically, the Swiss had established a celebrated, or notorious, 'needle-park' in Zurich, an area in which heroin dependants were free to use the drug without supervision. It was later regarded as a social disaster, and created a heroin slum. Furthermore, it acted as a direct enabler of heroin use (Kenny, 1999).

3.6 SUMMARY

Diagnosing and assessing a heroin use disorder can be quite complicated. Such disorders involve biological, psychological (including behavioural, cognitive, and emotional) and environmental factors that influence its onset, course and treatment. Because of the interactions of these three types of factors variations between presentations of heroin use disorders in different users are evident. However, research has made many advances in the past few years and some promising interventions have been developed for people who are heroin dependent.

CHAPTER FOUR

RESEARCH DESIGN

4.1 INTRODUCTION

Qualitative research techniques are now a commonly used and accepted means of social enquiry, particularly in the field of mental health behaviour. Although survey methods remain dominant, there is recognition that qualitative research methods have the capacity to inform survey designs and to complement findings. Importantly and in their own right, they provide a means of interpreting behaviours which might otherwise seem inexplicable. This is particularly the case among 'hidden' or 'hard-to-reach' populations - such as heroin users - where there exist practical and methodological difficulties in the use of large scale quantitative surveys (Dos Santos & Van Staden, 2008; Dos Santos, 2006; Breakwell, Hammond, & Fife-Shaw, 1995). While there is evidence of an emerging interest in qualitative studies on a range of aspects of drug using lifestyles since the 1980s, this has largely focused on local drug markets, crime and drug use 'careers'. The public health imperative to reduce HIV infection associated with heroin use brought about renewed interest in the use of qualitative methods in the field of illicit drug use research in some countries. It was the recognition of a lack of knowledge about risk behaviours associated with heroin / drug injecting which initially spurred interest abroad in undertaking small scale qualitative projects to specifically investigate needle sharing and sexual risk behaviour (Hughes, 2004). Rather than being understood from the perspective of the individual alone, risk behaviours have been shown to be best understood as highly sensitive to the relationships of heroin / drug injectors with each other in the context of the social circumstances and environments in which they find themselves (Wechsberg, Luseno, Lam, Parry & Morojele, 2006; Hughes, 2004). In countries where a tradition of qualitative research exists, such methods have emerged as particularly well suited to studies of risk associated with drug injecting, and are particularly valuable in the development of public health interventions (Brook, Morojele, Zhang, & Brook, 2006). Yet it is important to recognise that the increased receptivity to the use of qualitative methods since the advent of HIV/AIDS is not indicative of a long-standing or major shift in the relative status or dominance of 'positivist' or 'interpretive' research paradigms. Such divides still tend to impede the combined use of quantitative and qualitative methods in the substance use disorder field (McKeganey, 1995). Instead, the increased interest in qualitative research reflects the practical as well as the methodological utility of qualitative methods in understanding and responding to public health problems among hidden populations. The present analysis, at the purely descriptive level, primarily concerns itself with the experience and expertise of specialists in the field of heroin use disorder intervention. These findings will be contrasted / compared with those of the long-term voluntarily abstinent heroin dependents in the previous study conducted by the present author (Dos Santos & Van Staden, 2008; Dos Santos, 2006).

4.2 RESEARCH DESIGN

4.2.1 Methodological paradigm

A qualitative descriptive research approach has been used for the specialist participant interviews. One of the strengths of qualitative research is the comprehensiveness of the perspective it provides. This research design, then, is especially, though not exclusively, appropriate to research topics and social studies that appear to defy simple quantification. Qualitative researchers may recognise nuances of

attitude and behaviour that might escape researchers using other methods. Another advantage of qualitative research is that it allows for the modifying of the research plan at any time and the adaptation of methodology, time frame and other specifics of the study to suit the objectives of the study, which not only increases the validity of findings, but allows for more control and freedom in the research process (Babbie & Mouton, 2002). The chief shortcoming of the chosen methodology is that it may not provide conclusive answers to the research objectives, but may allude to the answer and could furnish insights into the research methods that might provide more definitive answers. The analysis of material is potentially subject to researcher bias. Ultimately, however, the aim of the study is to provide an explorative and descriptive account of the recovery process stemming from interviews with heroin use disorder specialists. To this end, because the participants interviewed are regarded as specialists in their discipline and in the field of heroin use disorders, the information collected seems likely to offer a high level of corroboration.

4.2.2 Measurement

4.2.2.1 Sampling procedure and data collection

Purpose sampling / interviews were conducted with ten specialist participants in the field of heroin use disorder intervention. This sampling method was chosen based on the objectives of the study, that is, the participants were recruited on the basis of their reputation / specialisation within the said South African field. Although shortcomings in representatives may be evident since the specialist participants represent different professional disciplines (as various professional disciplines are involved in heroin use disorder intervention), the most easily identifiable persons were approached based on the author's judgement, which has been established after ten years of professional experience within the heroin use disorder intervention discipline (Babbie & Mouton, 2002). The interviews were conducted from April 2004 to March 2008. No incentive was offered to the specialist participants during recruitment. Before the interview commenced, a standardised plan of the interview was read out to each specialist participant and they were assured of confidentiality and anonymity. These participants were also informed that they were under no obligation to answer any questions with which they were uncomfortable, and that they were free to pause for a break or terminate the interview at any time. The biographical particulars of the specialist participants were documented by the author, after which an interview with each such specialist participant was tape recorded.

Specialist 1 is a director and founder of an established rehabilitation centre, and is also registered as a *National Association of Alcoholism and Drug Abuse Counsellors* (NAADAC) counsellor. The specialist is also a long-term abstinent heroin dependant (the individual was dependent on heroin for twelve years, and is now thirteen years abstinate). The specialist has been involved in the substance use disorder rehabilitation field for the last twelve years.

Specialist 2 is head of a university psychiatry department and was formerly involved on a leading level within the Central Drug Authority. The specialist possesses extensive international experience within the substance use disorder field, specifically with regards to heroin use disorder assessment and intervention, having worked in Singapore, Hong Kong, Canada, Australia, the SADC region, Western and Central Africa, Thailand, the United Kingdom and the United States. The specialist is also a board member of the South African Medical Research Council and of the International Council on Alcohol and Addictions (ICAA).

Specialist 3 is an Executive Director of an organisation that specialises in substance use disorder research, advocacy and policy formulation for state departments. The specialist holds a diploma in drug and alcohol policy and intervention from the University of London, and has over seventeen years of experience within this specialised field. The specialist is also a recovering heroin dependant (the individual was dependent on heroin for six years, and is now twenty-nine years heroin abstinate).

Specialist 4 is a social worker from the National Department of Social Development who has worked for over fifteen years within the substance use disorder field, specifically with heroin dependent committals for rehabilitation. The specialist is also an honorary member of Narcotics Anonymous and renders a facilitator role within Nar-Anon.

Specialist 5 is a social worker who formerly worked for a state hospital. The specialist managed an outpatient programme for heroin dependents for five years and also worked in the United Kingdom with heroin dependents.

Specialist 6 is a board member of ToughLove South Africa. The specialist has dealt with the many families of heroin dependents for the last fifteen years.

Specialist 7 is a medical sister, specialising in psychiatry, who was employed within the SANCA network for seventeen years, and has medically attended to many withdrawing heroin dependents since the surge of heroin use disorders in 1995.

Specialist 8 is also a medical sister who has been employed within the SANCA network for twelve years. The specialist has been involved in the assessment and medical intervention of heroin dependents since 1995.

Specialist 9 is a general medical practitioner who has for the last five years, in a private practice capacity as well as at a private psychiatric institution, practised within the field of heroin use disorder intervention. The specialist has also undergone training with regard to buprenorphine maintenance intervention regimes.

Specialist 10 is a clinical psychologist, also qualified and experienced as an anthropologist, who has worked in private practice for twenty-three years. The specialist, who also runs offices at Vista Clinic (a private psychiatric clinic), has dealt clinically with clients presenting with heroin use disorders since the onset of the heroin dependence syndrome in South Africa in 1995.

4.2.2.2 Semi-structured interviews

Semi-structured individual interviews were conducted with the heroin use disorder specialists in order to gain a detailed picture of their perspective with regard to heroin use disorder intervention and recovery. According to Babbie and Mouton (2002) this method provides much more flexibility than the more conventional structured interview, questionnaire or survey, because the participant offers a fuller picture and the researcher is free to follow up interesting avenues that emerge in the interview. Babbie and Mouton (2002) also describe the 'natural fit' that exists between semi-structured interviewing and qualitative analysis. By employing qualitative analysis an attempt is made to capture the richness of the emerging themes rather than reducing the responses to quantitative categories, and wasting the opportunity provided by the detail of the verbatim interview data (Babbie & Mouton, 2002). The inductive

nature of this approach is unique in that it assumes an openness and flexibility of approach that allows a conceptual framework to emerge from the data.

The semi-structured interviews with heroin use disorder specialists were tape-recorded. The interview between the author and specialist participant followed a general plan of enquiry, and an interview schedule with relevant 'probes' was utilised. The specialist participants were asked the following initiating question:

'What interventions, both psychosocial and pharmacological / medical, are in your opinion the most effective in treating heroin dependence?'

Various 'probes' were employed in order to further investigate their views regarding various aspects associated with heroin use disorder intervention. These probes were derived from diverse sources such as the professional experience of the author, the literature review, and from the findings of Dos Santos and Van Staden's (2008) study regarding heroin dependence recovery.

Is there a difference between treating heroin use disorder compared to other types of psychoactive substances?

What is your view with regards to the length of treatment / intervention?

Do you think that harm-reduction approaches, such as needle exchange programmes and methadone maintenance programmes, are beneficial or not within the recovery process?

Are you of the opinion that any specific type of psychosocial intervention is the most appropriate for treating heroin use disorders?

If you are of the opinion that medication should be prescribed, what medications for (a) withdrawal symptoms (b) cravings, are most conducive toward heroin dependence recovery?

4.2.2.3 Interview analysis

The interview recordings, which ranged from 14 to 42 minutes, were subsequently transcribed. Grounded theory analysis was employed to analyse the interview information. Grounded theory holds as a basic tenet that qualitative researchers do not go around testing a hypothesis to add to an already existing body of knowledge, but rather that they '*do not know what it is that they do not know*' (Babbie & Mouton, 2002:449). This was especially important considering the scarcity of research within the heroin use disorder intervention discipline in South Africa. When the principles of grounded theory are followed, the researcher formulates a theory, either substantive (setting specific) or formal, about the phenomena they are studying that can be evaluated (Glaser, 1992; Strauss, 1987). Adriaan Van Kaam's '*The Addictive Personality*' subscribes to an existential-phenomenological approach to understanding substance use disorders, in which substance dependence is described as a mode of existence, that embodies its own fundamental attitude and way of relating to the world (Van Kaam, 1966). Grounded theory, in accord with the existential-phenomenological approach, is one that is inductively derived from the study of the phenomenon it represents. That is, it is discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. Therefore, data collection, analysis and theory stand in a reciprocal relationship with each other. A theory is not established from the outset of the study and subsequently an attempt to prove the theory embarked on, but rather an area of study is initiated and what is relevant is allowed to emerge (Babbie & Mouton, 2002, Breakwell; Hammond, & Fife-Shaw, 1995).

Transcribed interviews were read, subjected to grounded theory analysis, and discussed by the study's promoter and author / researcher in order to determine the usability of the material and the categorising of themes within the interviews; this increased the inter-rater reliability of the study. Interviews were then purged of all connecting words in order to separate out words containing meaning versus words lacking significance (Elgie, 1998). In order to authenticate the interpretations, conclusions regarding the interviews were taken back to all the specialist participants for possible enrichment and verification of interpretations / significance (Breakwell *et al.*, 1995).

The interview comprised separate meaning units. These units were determined by phrases or paragraphs that were able to stand on their own and generate meaning. The translation of interviews into such units involved using the participants' own language in order to best generate a true meaning of their language. Categories were established by removing the meaning units from the rest of the interview and applying phrases that would encompass several of these units at once in their totality. These categories were coded in order to identify the regularities. Categories that were clustered together became themes (Elgie, 1998).

The discussion of the findings was organised in the following way:

- * the themes that were derived from the interviews of ten heroin use disorder specialists were explored in order to discover the explicit factors deemed necessary in facilitating heroin use disorder intervention and recovery;
- * the presumption with regard to the themes is discussed and compared to the actual data that was derived from interviews; and
- * the themes and their meanings were compared with the findings of an earlier study regarding heroin dependence recovery by Dos Santos and Van Staden (2008) and Dos Santos (2006), as well as with the existing literature regarding this subject.

It is anticipated that the views / input from the heroin use disorder specialists will contribute to the advancement and planning of heroin use disorder intervention services / programmes.

4.3 ETHICAL CONSIDERATIONS

- * The principle of informed consent was adhered to in the study. The specialist participants were fully informed with regards to all aspects in the study that might reasonably be expected to have influenced their willingness to participate in the study (Zechmeister & Shaughnessy, 1992). All specialist participants were also informed of the author's / researcher's status as a doctoral student studying heroin use disorder intervention.
- * Understandable language was utilised when obtaining the appropriate informed consent. Each specialist participant's consent was appropriately documented (*The Professional Board of Psychology, Health Professions Council of South Africa, Ethical Code of Professional Conduct*, 2002).
- * Informed consent was obtained from each specialist participant for the recording for the interviews (*The Professional Board of Psychology, Health Professions Council of South Africa, Ethical Code of Professional Conduct*, 2002).

- * Input from all specialist participants was treated in confidence, although due to the nature of the method of data collection (interviews), the participants cannot be considered to be anonymous since the interviewer collected the information from an identifiable participant (Babbie & Mouton, 2002). However, all information contributed was regarded as confidential and is only identified by numbers. No identifying information was included in the thesis itself, and conclusions in the study were not ascribed to any particular specialist participant.
- * The welfare of the specialist participants in the study was addressed at all times. The harm to someone who participated in the study was not greater than the risk that the specialist participant would normally have encountered (Breakwell *et al.*, 1995). Due to the explorative nature of the study and characteristics of the participants, it is not anticipated that this ethical consideration would have been contravened.
- * No form of deception was utilised within the study. Due to the explorative nature of the study, all specialist participants were fully informed with regards to the nature of the study (Babbie & Mouton, 2002).
- * From the outset of the study it was made clear to the specialist participants that they had the right to withdraw from the study at any time without any negative effects for them (*The Professional Board of Psychology, Health Professions Council of South Africa, Ethical Code of Professional Conduct*, 2002; Breakwell *et al.*, 1995).
- * It was made clear to the specialist participants that there was no form of direct benefit from participating in the study (Elgie, 1998).
- * The contact numbers of the author / researcher and the UNISA Psychology Department Ethics Committee were provided on the consent form for any questions or comments regarding the conduct of the study.
- * All findings have been reported and will be made known to the scientific community. Technical shortcomings have been indicated; limitations of the study and methodological restraints that determine the validity of the study has also been specified (Babbie & Mouton, 2002).

4.4 SUMMARY

The overall aim of the study was to conduct qualitative research, exploring in detail the views of specialists in the field of heroin use disorder intervention. The findings of this study have subsequently been recorded in the following two chapters.

CHAPTER FIVE

RESULTS

5.1 THE GLOBAL EMERGENCE OF HEROIN USE DISORDERS

The first theme to emerge from the data concerns itself with the historical context of heroin use and the onset of heroin use disorders internationally, specifically in the United Kingdom. One specialist participant discussed the Industrial Revolution and the subsequent maltreatment of migrant labours from the East. As solace for their hardships, many migrant labourers turned to alcohol and opium. This theme was regarded as being important so as to appreciate the appearance of heroin use disorders on a global level, the criminalisation of heroin use, and later the emergence of the heroin use disorders in South Africa.

'If you really go back in history then Britain's really responsible for a lot of it - we hit India - to protect the Indians from themselves I suppose. We discovered opium, and it was at that time that we were doing the Industrial Revolution, and literally the whole of Victorian England were opium addicts and that's the way we managed to - my family was in the wool trade, we had wool mills, and my grandfather... there's actually a village in Bradford, a part of Bradford which is a huge industrial area, and one of the main heroin areas in Britain because it's all Pakistani. Where our mills are, or were - my great grandfather called it Idle, as in they're just a bunch of idle bastards, because the laws changed whereby children under twelve were not allowed to work more than a nine-hour day. Okay, so he reckoned it was just idle people, and there's a load of history involved in that sort of stuff. The whole Industrial Revolution in Britain was fuelled on gin and opium... and it really was... the working class were all on opium for God's sake, and gin, because life was so unbearable, because people like my lot were enslaving them, and when the British broke free, I mean my father imported Pakistanis, because they worked like dogs for no money.'

National drug control policy in the United Kingdom, in the United States, and almost all other countries, is heavily committed to a model of prohibition backed by punishment. The best-known example of prohibition occurred in America between 1929 and 1933. Prohibition provided a convincing demonstration of what can go wrong with efforts to legislate alcohol / drug-taking out of existence (Gossop, 2000; Plant, 1999; Szasz, 1990). Prohibition is still with us. It no longer applies to alcohol in the Western societies, but to drugs; and most people accept this as a completely natural and desirable state of affairs. As with the prohibition of alcohol, the laws prohibiting drugs were passed, not so much on the basis of reasoned argument or scientific law, but more often as a result of some moral crusade. Anti-Chinese feelings in the United States culminated in the Harrison Act. This made it impossible for the hundreds of thousands of opiate dependents in America to continue obtaining their drugs by legal means. The user was forced to become a criminal and to associate with criminals if they wanted to continue using heroin / drugs. As a result, the myth that all heroin misusers are criminals becomes a self-fulfilling prophecy: the laws had made it a criminal offence to simply be a heroin dependent (Gossop, 2000; Plant, 1999; Courtwright, 1982). The historical context of heroin use played an important (political) part in its eventual criminalisation.

'The criminalisation was hectic and it was all political. It was politically driven, the 'war on drugs' is political. It's a political thing.'

Availability is such an obvious determinant of heroin ingestion that it is often overlooked. In its simplest form, the availability hypothesis states that, the greater the availability of a drug in a society, the more people are likely to use it, and the more likely they are to run into problems with it. Because socio-cultural factors will also have an effect, the precise manner in which different societies respond to the availability of a drug will vary. The physical availability of the drug is the most obvious of these, but there is also psychological availability (whether the individual's background, personality, beliefs, and so on serve to increase or decrease their interest in using a particular drug), economic availability (whether or not the use of particular drugs is

affordable) and social availability (the extent to which the use of a drug is permitted, encouraged or discouraged by other people whose opinions and behaviour are important to the individual user) (Gossop, 2003).

'Everybody was on heroin. Everybody was on opium - all the women were on Laudanum, and you read something like de Quincy's opium... confessions and pains of opium, you know what I mean?'

Some of the specialist participants felt that the global pervasiveness of heroin availability has caused it to become such an international problem, both in terms of the criminal underworld and in terms of heroin dependence, that it seems almost invincible to eradicate or treat. Advocacy for the depenalisation of heroin misusers was cited as a crucial intervention strategy that needs to take place in South Africa and internationally.

'Now what's happening - the drug cartels, and this is internationally a problem, is so strong that no-one can do anything to them.'

'It's too late, we can't decriminalise it now. It would be ridiculous. We can't decriminalise the drugs. But we must certainly start looking at depenalising the user.'

There is a widespread belief in the existence of 'The British System' which has been applied to the medical control of the heroin problem in the United Kingdom. Belief in 'The British System' tends to become stronger with the increasing distance from the United Kingdom. This is often, and quite falsely, described as consisting of the widespread medical prescription of heroin to dependents. In fact, heroin was only ever used in this way during the first half of the 20th century when a very small number (of mainly middle-class and medical) dependents were provided with heroin prescriptions by private and family doctors. Since the radical changes during the 1960s, and with the vastly increased numbers of opiate dependents since that time, heroin has only rarely been made available to dependents on prescription. Recent estimates suggest that there may be up to 150 000 heroin users in the United Kingdom. Only about 1% of these are receiving any sort of injectable drug and only a small proportion of those are receiving a prescription for heroin. In 1990, the total number of dependents receiving injectable heroin was approximately 200. Even though this practice receives a disproportionate amount of international attention, the prescribing of heroin or other injectable drugs is numerically of small significance within the overall British response. Marcus Grant noted that *'like other British phenomenon, the Loch Ness Monster, it is more talked about than observed and better known for its mythic dimensions than for its clear authenticity'*, and despite this, The United Kingdom is attributed for medicalising the treatment of heroin use disorders (Gossop, 2000).

'Yes, heroin (maintenance)... anyone who has any knowledge about heroin, or who has dealt with heroin patients, will know that it is hell to stop.'

'Heroin... Britain now sees it more as a medical issue - but this is a long way down the line.'

The latest 'wars against drugs' were declared first by President Nixon in 1971, then by President Ford in 1976, President Reagan in 1982, and by other drug warriors on repeated occasions since then. The wars were initially intended to be waged supply. Gradually, it turned into a real war involving the US Customs Service, Coast Guard, Border Patrol, Department of Defence, Federal Aviation Administration, the intelligence agencies and even NASA. National Security Agency satellites tracked shipments of chemicals to processing laboratories in South American countries. Drug Enforcement Agency personnel carried out their work in more than forty foreign countries. Many were assassinated or placed on hit lists (Gossop, 2000; Wistosky, 1990).

'George Bush can make whatever he wishes for oil, or whatever, but the drug cartels, a block away from the White House, he doesn't have to watch a movie to see it - it's there. You can do nothing. The last guy who tried was John F Kennedy - who left the planet with a bullet in his head, he was shot. So the thing that's happening there, and I think in our country too.'

In the United States, where the War Against Drugs has been fought more intently, the unforeseen consequences of using the law to regulate drug use have been greater. The anti-drug laws have become increasingly stricter. In 1993, more than 1.1 million people were arrested for drug law offences and the increase in the number of people arrested for drug offences is directly related to the growth of the prison population. Between 1986 and 1991, the proportion of people in American prisons sentenced for drug offences more than doubled, from less than 9% to more than 21%. It is striking that the increase was largely due to the incarceration of black and Hispanic drug users. For black drug users, imprisonment rates increased by 447% and for Hispanics, rates went up to 324%. In 1994, for the first time ever, the United States prison population exceeded one million. In California, which has proportionately the largest prison population in America, there were 126 000 prisoners occupying spaces intended for half that number of people. The California prison system alone costed \$3 billion a year to run in 2000 (Gossop, 2000). The subject of incarceration is discussed in greater depth later in the chapter.

5.2 THE IMPACT OF HEROIN USE DISORDERS ON SOUTH AFRICA

South Africa's unique history and distinctive cultures have resulted in a local drug scene unlike any other in the world. Apartheid ensured that patterns of drug consumption and distribution remained highly segmented along ethnic and regional lines. This only makes sense - drugs are a social phenomenon; and when socialisation across ethnic lines was prohibited, each ethnic group developed its drug culture independently. Drug markets require trust, and it's difficult to trust people when you are not allowed to socialise in public. As integration proceeds in the democratic era, many of these divisions are fading. When it comes to vice, however, the changes are not always good. Getting to know one another has meant getting to know each other's drugs, and opening up the drug markets has allowed competition to erode longstanding trade relations based on trust and accountability. While many of these apartheid-era divisions persist, the drug scene in South Africa is becoming increasingly difficult to compartmentalise into neat divisions. Apartheid did produce some unintended positive results. The isolation of all South Africans during the years of sanctions insulated the country from many of the most virulent substances that flow through the global drug economy. Heroin and cocaine, virtually non-issues prior to 1994, only took off once South Africa was allowed to engage fully in international commerce and travel once again (Leggett, 2001). All specialist participants regarded the availability of heroin and consequent heroin misuse to be a relatively new and concerning phenomenon in South Africa.

'It's a brand new phenomenon.'

'Just on the files in my office, I made a sum, very primitive. The turnover of heroin only in Centurion must be over 70 million Rand.'

Since the 1994 elections, South Africa has entered a new phase in its drug history. The number of airlines operating out of OR Tambo International Airport has more than quadrupled since 1994, including carriers to countries which are close to significant sources of botanically based drugs such as Thailand, India and Brazil. But most disturbingly, a democratic South Africa has proved irresistibly attractive to international syndicates. The opening of the borders has allowed new immigrants with substantial experience in the international drug trade, particularly Nigerian nationals, to import and market drugs aggressively to all segments of the population. The Nigerian dealers have succeeded (where other groups have failed) in promoting heroin in

epidemic proportions. Nigerian drug dealers, while active across South Africa, are centred in the Hillbrow area of Johannesburg. The need to intervene on a national level with regard to drug smugglers was highlighted as vital, especially taking into account the relatively early onset of heroin dependent individuals in South Africa (Steinberg, 2005; Leggett, 2001).

'Another thing is they must deal with the drug smugglers. I think that this is where the country's biggest problem lies.'

The lack of specialisation and manpower since the dismantling of specialised police units, such as the South African Narcotics Bureau (SANAB), was cited as a severe constraint in dealing with the drug problem in South Africa. Corruption amongst law enforcement officials and mental health / health professionals was also mentioned by the specialist participants. The bribing of law enforcement officials and their involvement within the drug trade is also supported in the literature by Cramer (2005) and Leggett (2001).

'I have a report from the United Nations that states that in December, before they closed down SANAB in April, nineteen laboratories in our country were closed down. In April it was dissolved.'

'Now the stuff that you and I buy in a laboratory for a cold, normal stuff, it has codeine that is the same family as heroin. Somehow these factories or laboratories legally import the stuff or legally make cough syrup with codeine in, or a this or a that, that's what the day personnel do. At night, in the other halls, they make designer drugs for the clubs or the streets - who will know? Who will stop them? A guy from SANAB, the guys from the Scorpions, he saw heroin addicts in the street, and he asked me in my office; "do I know so and so", and I said, "yes, I know him, actually as a crack addict". No, he's actually a big drug dealer in Pretoria. They went into his office and looked him directly in the eyes and said "we know you bring drugs in". He said, "yes, prove it". What happens, he takes out a piece of paper, he said he hadn't seen the paper in a long time. What paper, why? He has so much money that when the Scorpions searched him, he laughed and wanted to bribe him for 58 million, of the 58 million, he paid him 38 in cash. That money came from drugs, not from a bank. They saw he drove a Porsche... he paid cash for the Porsche. They realised that they wouldn't be able to catch him for drugs ... there's so much money in the business.'

'I have an addict that can say that "the doctor", which we spoke about, he does a little illegal drug dealing himself. Instead of doing it on the street, you must pay your prescription fee and he gets it sent off to the dispensary himself. I think the government built in that dispensary for him - he takes that money too, and who will know? Because the mother thinks that it will work for my child.'

The specialist participants were also of the opinion that due to the relatively new emergence of heroin use disorders in South Africa, there is a deficit of specialised knowledge amongst professional people working within the substance use disorder discipline; however, comment was made that the backlog of a sound knowledge base regarding heroin / substance use disorder intervention has improved markedly within recent years.

'South Africa has not kept up to speed with the rest of the world... it was seen as a non-white issue, and because of the Calvinistic culture of this country, it was seen as a moral issue.'

'No, we're not Third World. Now in 1993 I was English, I carried a British passport, and I deserved the best. So in 1994 I started to apply for my citizenship of South Africa and I became a South African in 1995. What changed - that I no longer deserved the best? That the standards were so high because we're Third World? We don't say that about diabetes, we don't say that about polio, we don't say that about heart stuff. We don't say that about any other chronic illness.'

'Compared to what happens in Australia, Canada and England, I mean... we just saying take Valium and sending them home. That's it... many get Valium, then they might get an appointment six months later at a psychiatrist, you and I can make an appointment for after six months - he's not going to make it, it doesn't work that way.'

South Africa's present law and policy of illicit substances and vice is a mix of apartheid-era legislation and recent innovations, many of which were implemented to satisfy international conventions. Some of these innovations are helpful; others are misplaced, as is often the case when first-world solutions are applied to the problems of a developing country. South Africa has witnessed a succession of drug policy plans being formed

under a number of advisory bodies, pursuant to a series of legislative frameworks. In 1988 the National Plan to Prevent and Combat Alcohol Abuse and Drug Abuse in South Africa was formulated by the National Advisory Board on Rehabilitation Matters (NABOR) in collaboration with experts in the private and public sectors. In 1993 a Drug Advisory Board (DAB) replaced the NABOR in terms of the Prevention and Treatment of Drug Dependency Act of 1992. In 1995 the United Nations (UN) released a document titled 'Format and Guidelines for the Preparation of National Drug Control Master Plans', and preparations were begun to create one for South Africa. This resulted in the replacement of the DAB with the Central Drug Authority (CDA) in terms of the 1999 Amendment of the Drug Dependency Act. All these bodies have been poorly resourced and without any real power, and the CDA is no exception. Its primary duty is to assure the implementation of The South African National Master Plan. According to the UN, a master plan is supposed to define policies, priorities and responsibilities in the struggle against drug abuse. The South African Master Plan is basically a plan to make plans. The actual plans (Mini Drug Master Plans), which the CDA is expected to organise, are made by the provincial substance-abuse forums and action committees in each of the 382 magisterial districts. The National Drug Master Plan does not define any coherent philosophy of substance-abuse control and fails to prioritise any particular drug problem. It mentions decriminalisation and harm reduction, without taking a position on either of them. Furthermore, the National Drug Master Plan is not directly funded. The CDA is expected to solicit resources from other departments and programmes (Hosken, 2007; *National Drug Master Plan: Republic of South Africa 2006 - 2011*; Leggett, 2001). According to Leggett (2001) the CDA has no power to direct law enforcement, exercise control over treatment programmes, commission research, or to even decide on scheduled substances. So where does this leave us? It appears as though the CDA has a mandate as vague as that of South Africa's various 'commissions', without any of their powers. It remains to be seen whether the CDA is sufficiently influential enough to exert any real impact. There was consensus amongst the specialist participants that substance use disorder intervention is not granted the priority that it warrants by the South African government. Concerns with regard to the monitoring of alcohol and drug rehabilitation programmes by the National Department of Social Development were also cited as a barrier to the effective implementation of the National Drug Master Plan.

'So it's a master plan. There's many!'

'I must say, I don't think we have limited resources. I think it is... the priorities are wrong - the ministers BMW is more important than a cop to get them. Look at the majority of people who are not coming for treatment, there is a lot of money flowing, how many of our patients are now black.'

'It will become more and more, and that's what government fails to realise.'

'Who monitors those programmes? That's what worries me.'

Social fragmentation, poverty and a youthful population are three factors that contribute to South Africa's crime problem in general and its drug problem in particular. The mass relocations during apartheid shredded the delicate social fabric for many people, and destroyed the greatest crime prevention tool of all - familial and community accountability. The kind of mobility required to keep up with job markets in a rapidly globalising economy has not improved the situation much. South Africa experiences one of the highest levels of income inequality in the world, meaning that the same society produces people of vastly different material resources. Some argue that it is the feeling of relative deprivation, rather than absolute poverty, which is behind high crime levels. South Africa's population is also extraordinary youthful, with 44% of the population under the age of 19, and crime is often associated with large numbers of unemployed youth. These young people are coping with the pressures of growing up in a nation in flux, in which old values are lapsing before new ones can take their place. For a growing number, heroin provides one answer. In the past, poverty actually militated against the consumption of drugs within the black majority population. Unable to afford imported drugs, and unable to

travel internationally, most rural Africans simply never had any contact with drugs other than cannabis and inhalants. This is rapidly changing as South Africa becomes more urbanised and a growing black middle class develops (Leggett, 2001).

5.3 INTERVENTION

Intervention is clearly central to recovery and deemed of high importance, encompassing many factors. Results of the study confirm the themes of intervention and recovery as being interchangeable. The need to initiate intervention as early as possible (at the onset of the heroin misuse problem) was cited as an imperative, thus supporting the concept of high-level early intervention in the study undertaken by Dos Santos and Van Staden (2008).

'Ja (yes), and treatment should start then. Your best chance is your first time.'

The reported relief when heroin users begin residential treatment illustrated the importance of intervention for participants in the study undertaken by Dos Santos and Van Staden (2008). The renewed sense of hope referred to a sense of successful determination in meeting goals in the past, present, and future. Most long-term voluntarily abstinent heroin dependents were unable to detoxify independently due to physical dependence or were unable to cope with behaviour change without external help / support (Dos Santos & Van Staden, 2008; Dos Santos, 2006). Residential detoxifications were also regarded as being medically safer compared to detoxifying on an outpatient basis. The need for counselling alongside pharmacological / medical intervention was regarded as an important component in intervention. These findings are supported by Frykholm's (1985) treatment phase, in which it is proposed that the substance dependent perceives a need for external control and support, and thus seeks help. The majority of specialist participants regarded residential treatment as beneficial in promoting recovery from heroin use disorders.

'Okay... I think, to treat a patient, or most patients that I've encountered in my practice over 23 years, is to have them admitted in a structured environment like a clinic or hospital.'

'No, it should be inpatient treatment where they are in a safe place and where they can receive 24-hour treatment.'

'I think they must be admitted for treatment, ja (yes). Inpatient treatment.'

'What I always say to them is, if you want your child to live, rather send them to rehab and follow the programme than have your son, your child - whatever, your daughter or your son die because a programme is not being followed. It is much easier to live with the consequences of a recovering addict than one who died.'

'I do think that inpatient detox's are safer, more likely to succeed than outpatient as well, for heroin addicts. Bring people in, detox them and start a counselling process... it's just more cost effective than trying to manage their detoxing on an outpatient basis.'

The need to thoroughly assess patients was considered as crucial in terms of planning and implementing the most appropriate treatment intervention, such as psychotherapeutic, outpatient / residential, pharmacological and legal / statutory intervention.

'I think one of the most important things is to assess to see the seriousness of the problem.'

'You know, I think one has to evaluate the patient.'

According to Edwards *et al.* (1997), although intervention is one of a number of interactive influences that can play a role in recovery and within the natural healing process (Valliant, 1996), it can be particularly useful, for

example, in terms of encouraging a more constructive way of thinking, enhancing self-efficacy, or helping with the choice of an appropriate goal. Although 'maturing out' has traditionally been applied solely to the process by which some dependents give up drugs 'naturally' (Winick, 1962; Biernacki, 1986; Prins, 1995), McIntosh and McKeganey (2002) believe that this is too narrow a view of the processes involved. They argue that it is possible for the 'maturing process' to apply as much to those who overcome their dependence with the assistance of treatment, since it is the decision to stop that is important, and whether this occurs with or without treatment is of secondary importance (McIntosh & McKeganey, 2002). In the study carried out by Dos Santos and Van Staden (2008), various intervention experiences were reported to produce a range of positive effects in terms of the reduction of heroin and other substance use / misuse, physical health, confidence levels, isolation and coping methods, as well as an altering of the person in terms of their life, lifestyle, perspective, identity, and facilitating a clearer realisation / awareness of the heroin misuse problem. These findings relating to the positive effects of intervention are reinforced by the present study as well as other research (McIntosh & McKeganey, 2001, 2002; Edwards, 2000). The need for not only psychotherapy but also detoxification facilities was regarded as imperative in rendering treatment accessible and appropriate.

'Once again, to get back to therapy, you've got to treat all that stuff.'

'Of course the other option... you know if you're looking at options, is to monitor it within a rehab centre, or within a centre like SANCA, but if somebody is monitored, you know people will come in, you've then got to actually admit them, you've got to ascertain whether they're addicts or not. It's such a difficult thing to actually monitor.'

'With an established addiction, it's always important to admit the patient to a treatment centre where they can be dried out, and that centre must also have an opportunity for detoxification. Some people would have very serious withdrawal symptoms on stopping heroin, because of it being an opiate.'

'Badly. I remember him falling forward, cramping on the floor with stomach pains.'

*'The children... the young people have maybe not used the drug for so long. Take *****, he's been on the drug for three or four years, and he's really struggling badly with withdrawal. Is he just more squeamish, or is it really harder?'*

Most specialist participants were of the opinion that the length of residential intervention depended on the chronicity of the individual's dependence on heroin.

'It also depends on the individual, it depends on how long they've been using... I think there is a big difference for me between people who've been using two/three years, at a fairly early-stage heroin addict, and those who have been using seven to ten years, the more "chronic" heroin addict.'

'Yes, advanced heroin addiction. But I'm not so sure, I mean you know more about this than me... so I think inpatient rather than outpatient, unless it's going to destroy the rest of his life and he's going to lose his job, preferably I would say inpatient and long term - two years.'

*'There is also a difference in degrees. Something, I mean you saw that time with *****, who withdrew severely, and others that don't withdraw so severely. They're different, they definitely differ.'*

'The degrees differ so.'

'Shoe, Monika that's very difficult. We've had a couple of heroin patients here and not one of them really react the same with regard to medication, for example, if you take Lapalamé's patients, they go easier through withdrawal compared to the older, senior drug patients.'

Oppositely, other specialist participants were of the opinion that all heroin use disorders should be regarded as serious and necessitating intensive intervention, regardless of the length of use.

'If there is somebody who is not... if you could call somebody not a serious heroin addict. I think once you're on heroin it's serious. Parents have said to me "it's only dagga" (cannabis); I always say to them "it's not only dagga (cannabis), because it will lead to something else". Just like nicotine smoking is an addiction, you have to look at it as an addition.'

'At least six weeks. I'd prefer longer - ja (yes).'

'The six weeks sound maybe right, and it sounds long, but I think six weeks is very short for a guy that's addicted to heroin.'

'I think at least eight to ten weeks; I think that should be sufficient.'

It was argued that the duration of residential treatment also needed to be lengthy in order to facilitate the changing and stabilisation of thought processes and perspectives, as well as to adapt to the environment of the facility and the therapeutic community. This finding was also supported in the study carried out by Dos Santos and Van Staden (2008), with many long-term voluntary heroin abstinent participants speaking of the benefit of long-term residential treatment providing the necessary time for them to stabilise within a protected environment.

'Inpatient I'd say, people or the places I've worked at or with, usually talk about a month, or twenty-one days like Vista, but I do think the inpatient period should be longer because I think after one day you dried up or you clean from the drugs, it's out of you blood, in a way you... but in a way of thinking, your mind set hasn't changed. Because the first few days you suffer from withdrawal symptoms, and then when you actually get out of this terrible nightmare experience, after 10 days you start seeing reality a little bit, and then you have to adapt to strange people, in a strange very restricted small setting.'

One specialist participant was of the opinion that two years of residential treatment was the most conducive treatment period for chronic heroin dependents.

'Two years?' Three to two years (in residential care) the chances for relapsing I think is much smaller.'

'According to most of the things that I've read and also the American programmes for heroin addicts, they reckon two years.'

According to Edwards (2000), research demonstrates that a range of competently applied treatment interventions with different theoretical underpinnings are likely to result in roughly the same kind of success rates. This obviously makes it somewhat difficult to establish which aspects of treatment intervention are particularly effective. Some specialist participants held the sentiment that most rehabilitation centres in South Africa are not successful in the treatment of heroin use disorders, and that that the need for more therapeutic specialisation is a necessity.

'The average rehabilitation centre is not very successful. The number of people going and the number of those coming right is very slim - you will never admit it, but it's the truth.'

In the study conducted by Dos Santos and Van Staden (2008), participants described some kind of negative / unsuccessful experience of intervention at some stage in their heroin dependence, including treatment / intervention not being sufficiently intensive or long enough, lack of adequate skills in terms of specialised knowledge of professionals working within the field of substance use disorder and a lack of alternative activities or education within intervention services. Clearly such negative experiences served to re-emphasise some of the positive components reported to be essential for successful treatment.

5.3.1 Components of intervention

The necessity for information and education within primary prevention and treatment intervention for heroin use disorders was cited as crucial both in terms of preventing heroin / substance misuse, facilitating cognitive restructuring in those inflicted with heroin dependence, and in terms of enhancing the therapeutic skills of the professional staffs. This aspect was cited as being of paramount importance both in the present study and in the study regarding heroin dependence recovery (Dos Santos & Van Staden, 2008). One specialist participant pointed out the high prevalence rate of alcohol misuse (although this could equally apply to 'nyaope'; the African term for heroin) amongst school children, particular within the black African community. The specialist participant attributed this partially due to the high number of back pupils in a class, as opposed to the traditional white schools which typically have fewer pupils. The specialist participant was of the opinion that in classes with a large number of pupils, such as those particular to the traditional black African schools, alcohol and drug misuse is more likely to go unnoticed or addressed by school staff.

'You just decide - so information plays a big role.'

'No, think that's very important. I mean, they spend so many hours during... the students, or pupils, time at school, they don't teach the children about drugs, they're not educated.'

'I've read the other day; alcohol is very prevalent now amongst school children, they want to institute tests, alcohol tests, at schools. They arrive at school, if they drink at school... I'm sure more in the black community, white schools are still small. I mean, you're sitting thirty pupils in a class in the white schools. In the black schools... I know all schools are mixed, but you find ten times the amount, especially in townships. With so many pupils in a class, I mean, how are you going to know on that level? You will not pick it up easily.'

The obligation and necessity to enhance and improve therapeutic skills, professional qualifications, viewing heroin use disorders as a primary health condition (as opposed to solely a moral or social problem), education and accreditation within the substance use disorder intervention discipline within the South African context was perceived as vitally important. The necessity to maintain therapeutic boundaries was also regarded as a critical component of therapeutic intervention.

'Upskilling of staff. There must be boundaries.'

'You know, in the UK, if you're a psychologist, you have to have an add on qualification to be an addiction therapist.'

'In many rehabs they putting mats on the floor and DSTV, but there must be a social worker and psychologist that knows what they're talking about.'

'You should educate us more about drugs. I mean, I admit patients and I search them, everything, but I want to see it, what it looks like. I don't know how other people feel, but I don't know enough.'

'So it isn't being seen as a health issue, and still isn't, it's seen as a social problem, and that's it, where volunteers can deal with it, where, you know - people haven't seen it as a primary health condition. There has to be a plan, you've got to be upskilling, there's got to be education.'

'But you have to be highly skilled and understand addiction on a deep level in order to be able to implement that programme.'

In the study by Dos Santos and Van Staden (2008) intervention was considered as one of the most important requirements for recovery. However, a number of other important factors also emerged as being important, including various personal requirements, such as being focused and committed to putting in effort and hard work, being personally ready to change, and accepting that heroin dependence was enduring and that there was no miracle cure. The need for such personal requirements is reinforced by Edwards (2000), who suggests

in particular, that dependents need to be motivated (and specific intervention such as Motivational Interviewing are useful here), as well as ready to change, a view strongly influenced by the Prochaska, DiClemente and Norcross model (1992). The ability to therapeutically intervene with heroin dependents in groups constituting other recovery substance dependents as well, may reinforce resocialisation concepts as being conducive to recovery.

'Heroin addicts do stand out, but they are for me... you can deal with them. It's only here and there, like I said 3% or 4% that are maybe these severe cases, but otherwise they are not for me so different from the others. They socialise also well in a group, so they are not different from the others.'

Participants in the study conducted by Dos Santos and Van Staden (2008) described the need for specialist treatment rather than general help, for example, several participants referred to the need for both an individualistic, non-judgemental and realistic style of treatment intervention, which should be instantly / easily accessible when required. The specialist participants in the present study deemed therapeutic competencies such as Motivational Interviewing (Miller & Rollnick, 1991) as an effective means of intervention, as opposed to confrontation. Meeting patients on their level and refraining from adopting a superior or confrontational style, was considered to be of benefit in working therapeutically with recovering heroin dependents.

'Fighting with an addict - that doesn't work for me.'

'You need to have a motivated client who will see the need. But to have a motivated client means you must as a therapist have certain competencies, for instance, you have to have competencies in Motivational Enhancement Therapy. How do you enhance motivation in a client? You have to have training in that, and to improve the client's need to actually follow the programme and respond to what they're being offered.'

'Then I realised, it amounts to you meeting him on his level. What is important to him, not what's important to you. What can he remember, where is he sleeping tonight? Once that's sorted out, then the alcohol problem can be addressed. Manie Dreyer said "you must ride super-tube with him". When he turns, you turn, and I think that makes the difference.'

The particular structure of treatment intervention was also crucial to certain specialist participants, in the sense that it provided an abstinence-based, protected, structured / intensive residential programme (as opposed to outpatient intervention), ideally over a relatively long period. High level early intervention and long-term care, as opposed to brief interventions with no form of follow-up, were highlighted as important strategies in treating chronic heroin dependence. These findings are consistent with those of Dos Santos and Van Staden (2008), with most of the long-term voluntary abstinent heroin dependents citing long-term care and resources as having played a crucial role in their recovery process. Similarly, McIntosh and McKeganey (2002) found that their interviewees valued the ability to drop into a facility or contact someone without prior arrangement, since challenges to their recovery could occur at any time. The need for adequate resources, such as skilled medical staff and equipment / medication in residential facilities, was cited as key to treating patients holistically, as well as in post-treatment after-care / counselling.

'If you don't have back up in medical staff and equipment and medication for detoxification to deal with withdrawal, you run the risk of patients recompensating and getting worse and becoming very sick.'

'That's why you going to need more than a month. I do not say that this period... I mean, the patient can go out for a day or two, but he must come back, and it's better to keep him like in a protected environment, because it's so easy to relapse, because here you've here for twenty-one days, or like in a rehab centre, and everything goes well because it's easy not to use drugs because you cannot use drugs actually. But if you go out, because it's not like a halfway house, where you gradually get exposed to the normal stressors, like they do at mental institutions.'

'I think brief intervention where in that suggestions are made about long-term care, I don't know what long-term care is available apart from the 12-step versions or a church group or those kind of things. Only when

those strategies are developed, then those kind of brief interventions might work, but unless brief interventions leading to long-term care, then I think they're going to be of limited value.'

The monitoring of heroin dependents on an after-care / outpatient basis was deemed important in securing long-term abstinence and eventual recovery, supporting the findings of Dos Santos and Van Staden (2008).

'I think, if you take it... to monitor them, it's a period of time. So for heroin we see if they're clean for a week, and then tested once a month - you have to look at six/seven months - to see if he is really clean.'

The need for an adequate time period for detoxification was regarded as vital, especially for patients continuing on an outpatient basis.

'One week is not enough for dealing with withdrawal in preparation for outpatient rehabilitation.'

Frustration in finding suitable and affordable residential centres for recovering heroin dependents was cited by the specialist participants. The long waiting period before admitting an individual to a state facility according to the statutory process was mentioned as a barrier to intervention. Lack of post-treatment accommodation and facilities such as halfway houses were cited as a vast obstacle related to the long-term treatment and care of heroin dependents, especially for those with average or low incomes. Similarly, in the study conducted by Dos Santos and Van Staden (2008), some participants verbalised the lack of accessibility to residential care as a barrier to their recovery.

'You see, the patient here, the family is fed-up, the girlfriend is fed-up, and he's on the street - and there's no-way you can rehab a guy on the street. You can't always book them into places like Castle Carey or Magaliesoord. The other thing about Magaliesoord is that there is so much red tape and they can't go voluntarily anymore - so you need to get a court order. The normal procedures, in any case, took about three weeks.'

'The first alcoholic who came to me, I'll never forget, a tall guy. It was my first day at the office. I asked him what I must do. He said "you must help me". I asked him what I must do; he said I must find him accommodation, "us addicts always need accommodation". He gave me a name - say Ken Barry, and that's how I knew him - always looking for a place to sleep.'

'So now the guy is really into therapy, but you can't keep him off the streets for the three weeks, so a halfway house or somewhere would be the first place to start. But then again, after they are discharged - where are they going? So again, a halfway house after treatment and employment.'

'It's a big shortcoming, you should have halfway houses, like the mental hospitals, the guy goes to work and he comes back at night, and at night he's got the support from his therapist, his psychiatrist, or whoever might be on this team. He discusses the problems that he may have encountered during the day, and gradually, but very gradually, you reintroduce him to society as such, because it's difficult if you've lived in a place, in a low stress environment like a clinic, and then go back to society.'

'There are a number of treatment centres, as you know, in South Africa, that seem to be doing well, are private and are costly, and are not accessible to ordinary people who have average incomes or no income at all.'

The chronicity of the heroin dependents that some of the specialist participants dealt with included extremely severe or 'hard-core' cases: few resources could be found to assist such heroin dependents. Some specialist participants, in an attempt to find accommodation / shelter for chronic / impoverished heroin dependents, were at times left with no other option but to approach ill-equipped and trained church missions as a last resort.

'Mostly the one's that come in are the one's overdosing, being hit by a car, picked up on the streets - half way overdosed, something like that, and by word of mouth. Because they go back to the streets, the one's that feel they can't cope with the streets say "go to the hospital" - if you can get out there.'

'We've got loads - normal homeless missions that we use now. What's also bad is that I've had two people who were being helped by a church organisation, and they've got some kind of house that they house them in. We've tried to say to them that this is a process, and the moment they either smoke or took a drink or

relapsed once; they throw them out. So even they that are sort of bragging about the house that they keep them in, is not understanding the process of rehabilitation - that the chance is big that they will relapse. So again they are thrown out by the people from the church who said they would help them, so ja (yes).'

'So you haven't been fully rehabilitated, those personnel working there are not interested in doing rehabilitation. So it's not working out in a mission.'

'You could say it's actually community based theory that we try to base this on. You have to have... something to wear, we don't give them money - don't fall for it: train money or whatever, and then you need a place where they can stay. There is nothing like that that we could find. So when you discharge, you discharge and that's that. You can't even stay long if there's a crisis. At the moment we try missions, which is also not really working because the control there is not that well.'

The use of alternative therapies in treatment intervention, such as relaxation and exercise, were beneficial in increasing self-awareness, distracting participants from their heroin misuse problem, and preventing therapeutic strain. This was supported within the scope of this study as well as in the study by Dos Santos and Van Staden (2008). Marlatt and Gordon (1985) also reinforce the use of alternative activities in their Relapse Prevention model. It is also suggested that cognitive-behavioural skills training approaches, such as relaxation, can help recovering heroin dependents achieve a greater lifestyle balance. Furthermore, helping the recovering heroin dependant to increase positive activities, such as exercise can also improve mood, health and coping, as well as increase self-efficacy, through acquiring new skills from new activities (Larmier *et al.*, 1999).

'A doctor explained to me in Pretoria Academic hospital, that in the synapse where the addiction actually takes place, if you exercise; your brain releases endorphin... which does the same job as the drug.'

'I know what I am talking about, because for ten years I was a provincial cyclist. In my 1st race I rode 1 000 km on a bicycle - that's addictive, but they didn't book me up. If a day came that I skipped training, I'd go through so much withdrawal that if someone argued with me I'd loose it. But after I've cycled, I'm restful and complacent. Now what I say is encourage exercise.'

A further treatment intervention component that was reported to be influential in producing positive effects was the adoption of a holistic approach, in addressing the heroin misuse problem, underlying problems, and problems caused by the use of heroin, thus supporting the findings of Dos Santos and Van Staden (2008). The range of targets include behaviours, coping methods, physical and psychological / emotional problems, practical problems, social and relationship difficulties, self-awareness, problematic behaviours, lifestyle, circles etcetera, rather than just the problem of heroin misuse.

'Well, I believe it's holistically.'

'I believe in a holistic approach. So I hardly see any patient without family, girlfriends or mother or whoever is involved.'

'So I think for the individual, and I have to say spiritually as well, but medically, psychologically and spiritually they need to be supported and nurtured.'

Apart from the need for holistic therapeutic intervention the requirement for therapeutic intervention together with medical treatment was thought to be of prevailing importance. The need for resources was a theme that arose from the analysis of most of the specialist interviews, mirroring the results of the study undertaken by Dos Santos and Van Staden (2008). The resources alluded to are financial, materials, human capacity, and skills etcetera.

'I think there needs to be a comprehensive intervention, and not just to deal with the medical. I think just detoxing people without an extensive counselling intervention is a waste of time. I think that just counselling people and then afterwards medical help is probably of limited benefit.'

'The other thing that I believe is that unless there are resources available, brief interventions are going to be of limited value.'

Participants in the study carried out by Dos Santos and Van Staden (2008) highlighted the need for safe and protected environments, away from temptations, during early recovery. In the present study, the specialist participants emphasised the need for protected specialised drug units, especially for youth, the findings of which are supported in the study conducted by Louw (2004) who studied the educational-psychological criteria for the evaluation of rehabilitation programmes for adolescent drug dependents in South Africa.

'The children, because they are close together and it's a closed unit, I think it's easier for them. The guy we admitted yesterday for heroin, he hasn't once come to ask for anything and he's also on heroin and dagga (cannabis).'

Another factor, which emerged as an important requirement for recovery in the study conducted by Dos Santos and Van Staden (2008) and the present study, was the need to accept complete abstinence of all psychoactive substances. This idea supports the study undertaken by Edwards' *et al.* (1997) study, who argued that recovery from severe dependence almost inevitably involves acceptance of an abstinence goal.

'I think that most of them, as in the Noupoot programme, should be made to give up smoking eventually as well, because addicts... it doesn't matter what they're addicted to, be it nicotine, be it any kind of drug that's an addiction, and it's obviously in their make-up to have an addiction. I think also that it included alcohol. It all leads onto other drugs.'

5.3.1.1 Physical intervention

The disease concept of heroin use disorders and the physiological dependence that heroin induces was discussed by some of the specialist participants. Neurological differentiations between heroin users and non-heroin users were alluded to, signifying the physiological changes that heroin may induce. The highly physiological dependence potential of heroin was cited as the main reason for the necessity of physiological / medical and pharmacological intervention.

'Remember, heroin addiction is a physical disease. There's a difference in PET scans between a normal person and a heroin addict.'

'A person that uses heroin will definitely become addicted after a week. I have no doubt about that.'

In the study conducted by Dos Santos (2006), heroin dependence was regarded as more difficult to recover from than most other substances of abuse. This powerful nature of heroin seemed to lead to a preoccupation with it, as the problem progressively took over their lives, while participants also seemed to lack any sense of choice over their heroin dependence. Similarly in the present study, specialist participants felt that as the heroin misuse problems develop, increasing tolerance and physical dependence plays a primary role in influencing this preoccupation.

'If they use it once or twice, no problem. I think they on their pathway, it may take some people five years or ten years, but eventually if they keep on using it, they going to get addicted.'

'I think the physiological one is the reason why the person returns (to heroin). So if you can fix a guys head and keep him clean for 18 months.'

Withdrawal from heroin was cited as not being fatal, yet, nevertheless, one of the most difficult drug withdrawals to endure.

'Heroin withdrawal is definitely not fatal. Probably the worst of them all, but definitely not fatal.'

'No, it's not fatal.'

The specialist participants of the present study generally felt that heroin was more dependency producing than most other substances of abuse. One specialist participant was of the view that there is no discernable difference between the various opiate substances.

'Yes, more or less similar. I think that drugs are only a "harder" form of the pills, is it not? Like pethidine and those things.'

'Your pills and drugs are closer together than alcohol and drugs. Pills and drugs you can compare a bit, they have similarities.'

'I don't think there is really. I think the pills such as pethidine is probably just a more refined form of the original drug.'

The occurrence of general deterioration in physical health, and various use related illnesses / problems was supported by the present study, as well as Dos Santos and Van Staden (2008) and the studies abroad by both Prins (1995) and McIntosh and McKeganey (2002). Although Prins (1995) suggests that a bad health situation is not always necessarily the result of heroin use, since all people, including heroin dependents, experience certain health problems. Nevertheless, McIntosh and McKeganey (2002) note that deteriorating health is a major occupational hazard of heroin use, with common physical problems for injecting users including serious vein damage and the risk of contracting lung infection, HIV/AIDS or hepatitis B, C & G. This was also mentioned by the specialist participants.

'So in that case, well a person can't say... but the risk, my gut feel, your study will probably research it, a heroin addict that begins with drugs at school level live until 25. There are some that last longer, but they are the exception. The average addict does not die from heroin, dies from lung infection or something like that.'

Numerous specialist participants also reflected on cases they had dealt with in which heroin dependents had suffered severe medical complications as a result of their heroin use. The need to continue caring for heroin dependents suffering from chronic illnesses such as HIV/AIDS was highlighted as being crucial. In the study conducted by Dos Santos and Van Staden (2008), many of the associated health problems were likely to have been influenced or at least exacerbated by participants not looking after themselves properly, including the use of unsterile equipment, and not exercising or eating properly.

'A guy came to my office who was HIV positive. I asked him why he wanted to leave drugs. He said he wanted to change his life. I asked him "why now"? He stated that he might live longer. I said "oh", now he's come to the idea, but generally, many guys who are HIV positive don't in any event die so quickly, they realise that they might still be able to live a quality life, and maybe if I leave drugs I might live even a bit longer.'

5.3.1.2 Emotional / psychological intervention

In recent years, researchers have been looking at the ways in which different drugs can be used to relieve different psychological problems. Alcohol, the barbiturates and Valium, for instance, can all be used as a way of blotting out feelings of anxiety or relieving stress. Many heroin dependents find it difficult to express their feelings of anger and aggression in an appropriate way. Heroin helps by suppressing their aggressive feelings (Gossop, 2003). All the specialist participants regarded heroin dependence to be symptomatic of underlying emotional / psychological problems.

'Addiction is a symptom of something else, why are they using it? You know, even if some young girl is using appetite suppressants, why is she using it? Sleeping tablets - whatever it may be, there's an addiction and

there's a reason why, you know, that destructive behaviour has something to it. I mean, kids don't just wake up oneday and decide "well, I'm going to use drugs". Initially they might say well let me experiment, on ecstasy, or let me experiment... but then very few who say "hey, I don't like the experience", or "I took it to feel what it feels like, I'm not doing it anymore", there are those obviously, but the others who carry on taking and the behaviour becomes more destructive. There's something behind it.'

'It might be a psychological thing to start off with, now why would you go and stick a needle in your arm to start off with?'

A high prevalence of co-morbidity was highlighted by the specialist participants, supporting the DSM-IV-TR (American Psychiatric Association, 2000) and Leshner (1999) literature concerning a high co-morbidity prevalence rate in heroin use disorders. Diagnosing emotional / psychological / psychiatric problems, such as depression, anxiety / panic attacks, paranoia, psychosis and eating disorders was cited as a crucial factor in the holistic approach in the assessment and treatment of heroin use disorders. Those individuals presenting with below-average intelligence were also reported to be at high risk with regard to developing a heroin use disorder due to their difficulty in adapting to, or coping with, mainstream society.

'You have to assess as to whether or not they are depressed or not anxious. Do they have any pre-existing psychological or psychiatric problem? Because if there's co-morbidity, then you don't just deal with the addiction on it's own, but you attend to the underlying problems, maybe if it's depression and so on.'

'Co-morbidity usually is depression, and anti-social, but mostly depression.'

'Bipolar (disorder) also increases the likelihood of drug abuse, because depression... the manic phase not a problem - because then they spend, and they have sex, and they feel happy and on top of the world, but as soon as they hit the low, then drug abuse is quite prevalent.'

'Yes, and it's always something... I don't know, if you're looking at adults, something they're not coping with in their lives. If you're looking at young people, they think they're not coping, self-esteem or whatever if may be. But no, I think addiction is addiction.'

'You must make a diagnosis, it's very important at that stage to see what is or was the co-morbid situation, was it depression, divorce and depression, or something go wrong at work, or was the person sexually abused, or whatever the case might be, and to try to rectify that.'

'In twenty-eight days out of the system, but why did they start using in the first place? What is in that child to make him go back every single time? Obviously strength is the one thing. So what is it? You've got to treat all that stuff as well otherwise you land up in the same situation as my daughter - and that I say would be interesting - to find out how many of these relationships fall by the wayside because of basically self-destructive behaviour. I don't like myself, I don't like me, whether you're an addict with a drug or an addict in behaviour, you know.'

'I think many people do take drugs either because they cannot cope with anxiety and/or depression, and anxiety goes hand in hand with low self-esteem, low self-confidence, and sometimes people are not so clever, whose IQ levels are not that high. They find it difficult to cope in our society, and because they do not make it financially, and because I think we live in such a capitalist sick society, that if you don't make it money wise, people don't acknowledge you, that's why you also get drug abuse amongst artists.'

Emotional / psychological intervention was deemed necessary in order to deal with the underlying causes of the heroin use disorder (for example, self-esteem). The specialist participants emphasised the supportive, non-judgemental role that a psychotherapist should fulfil.

'You've got to change the process around where you going to build up self-esteem so they don't use drugs. Once you're an addict, you can't build up self-esteem until you're off the drugs to actually get through to them.'

'One must see a psychologist.'

'I think in the beginning, the role of the therapist or psychologist or whatever, is to be very supportive, and I think you should get the message across to the patient that he hasn't done something wrong because guilt also plays a big role in the whole healing process, guilt is a thing that has to be addressed because you get rejected by society if you abuse alcohol or drugs, and then you start feeling guilty, because you've let down your parents, you've let down your friends, you've let down your wife, or your girlfriend or whatever the

case may be. Guilt plays a very important role, because if the guy cannot cope with his feelings of guilt, the chance of relapsing is very high, and I think that after this, or especially during the withdrawal period, or shortly after that, mmm, I think also that the therapist should be a little bit on the background, and just be very supportive.'

One specialist participant spoke about heroin use in the Vietnam War by the United States soldiers who used it as a barrier against the trauma to which they were exposed. The specialist participant mentioned the minority group of Vietnam Veterans who struggled to cope on their return to the United States due to the trauma to which they had been exposed in Vietnam, as well adjustment difficulties in terms of finding themselves between the polarities of being treated as heroes by the older US generation, while being treated with hostility by their peers who had evaded their service in Vietnam.

'The majority did stop; there was a small minority group that just didn't cope.'

'Yes, because in America... almost compare to South Africa now lately... when the guys came back from Vietnam there was a certain group of people, a certain population in the United States, that regarded, especially the older generation, they regarded these guys as heroes. Then there was this younger generation, especially the guys who stayed at home, who didn't have to go to Vietnam, and they started rebelling against this whole Vietnam... America's involvement in the East. So when these guys came back they were in a very difficult situation because on the one side there was their peer group, or members of their peer group who rejected them, and didn't want to mingle with them, and you had at the other side the older generation that accepted them and thought they were heroes.'

Some of the trauma symptoms of the Vietnam Veterans were exacerbated by their young age (an average age of eighteen years old). The trauma symptoms of many of the veterans manifested in aggression and criminal behaviour on their return to the United States, with some also continuing or substituting with drugs (including heroin) and / or alcohol.

'I'd say the biggest problem is that the people they sent over to fight the war were too young, an average of 18 years, from 16 years. Between 16 and 21/22.'

'Yes, because I think the younger generation are regarded as criminals, and that is why some of them turn to crime, they were exposed to criminal experiences in Vietnam, so they came back as criminals, in the United States, many of them started stealing cars, abusing alcohol or drugs which also... some of them started abusing alcohol and drugs in Vietnam already, they just continued when they got back to the States, because they couldn't find their way.'

At the time, the lack of knowledge in the mental health field regarding post-Vietnam War PTSD symptoms resulted in a severe barrier in the understanding and treatment of many of the Vietnam Veterans. According to the specialist participant, the term PTSD was only coined in the 1990s; one of the terms previously used to refer to the symptoms was 'Vietnam Syndrome'. The similarities between Vietnam and the South African border wars of the 1980's were discussed at length by the specialist participant. Mental health professionals in South Africa began to treat trauma afflicted national servicemen at the border post as opposed to engaging in post-service intervention. It was noted that PTSD syndrome treatment success rates at the border post were superior in comparison to post-service treatment of servicemen, which was attributed to the fact that those national servicemen who returned to combat were able to prove to themselves that they were capable of confronting and overcoming their fears and anxieties.

'At that stage PTSD was really only coined in the 90s. I mean, they talked about the Vietnam Syndrome, but they didn't really know what was going on, they didn't know.'

'But they didn't really know how to treat it, and they didn't know much about it, and they didn't know that it can be a long-term disease or syndrome. They also didn't know that especially guys who functioned well in Vietnam, in the war situation, when they got back they started suffering from PTSD. They thought, bring the guys back to normal society and he will heal and get better, and that's not true. What they've proved in South Africa - to treat the guy in the war zone, you get better results than treating him under normal circumstances. Ja (yes), because if you get removed from the war zone, all your mates and friends and fellow soldiers think you're a coward, they think you using it as an excuse, because I mean, because both post traumatic stress and depression are not necessarily visible diseases, or visible syndromes. That's why in

South Africa, at the end of the war, they started treating people at the border and then send them home. Send them to I Mil (I Military Hospital), they treat them there, or Oshikati, the sick bay there, they treat the patients there. Intensive therapy, and they actually try to send them back as well, to ambush, not ambush, combat, so they can prove themselves to themselves, because if you send a guy to I Mil at that stage, before 1994, people were regarded as heroes in South Africa. If you were on the border and you walk into the kaffie (green grocer), the Greek will give you a coke and a hamburger for free.'

Similar to the Vietnam account, many former national servicemen in South Africa are hesitant to speak about their defence force days due to the stigma that the era holds in contemporary South African society. This is in stark contrast to the 1980s in South Africa when national servicemen were treated with much honour and esteem in (white) South Africa on their return home.

'So now he invites you, you never had contact with him for 18 years, you grew up next to him, but after being to the army or the border for two years, when you get home you get treated like a hero. You get invited to his house, and he wants you to take out his daughters and he wants you to go watch rugby with him, and you must tell him about how you killed the black people, because that's what he wants to hear. But after 1994, that's why I say there are similarities between America and South Africa, after '94 - the same is going to happen with Iraq, the guys fighting there - the same story is going to happen there when they come back home. Now people, where people used to talk about it in pubs, about where they've been in the army, and what they do, and which camps they were placed in, where... they sent us into Angola, and which towns we invaded, how many people we killed there, people don't talk about it anymore, you're actually shy. You actually not proud to say you've been involved in National Service, in the army, and you've done National Service, but I mean then you had no option, either two years spent in the army, or you go four years to prison. Four years - they sent the guys four years to jail, sometimes longer if you refuse to do your national service, and I mean they were strict, they came to the schools. You couldn't dodge, like in America, the guys they moved from one state to another, so they couldn't trace them, and after Vietnam they just moved back.'

5.3.1.3 Relationship intervention

Another clear consequence with regard to relationships was evident in the study by Dos Santos and Van Staden (2008); in terms of the effect of using heroin, it resulted in various negative effects such as increased arguments, a bad family atmosphere, or the break-up of many relationships. The specialist participant regarded family and relationship intervention as being crucial. Parents, for example, need to deal with their own underlying emotional problems as well. The need to build trust and self-esteem / respect between family members was also expressed by the specialist participants.

'It would be much better for... and the talks that I give, I normally say to parents if you have small children you need to build up their self-esteem, and first of all you need to build up your self-esteem; your own self-esteem, because if you don't, children listen and watch, and that's how they learn. They, especially mothers', they learn bad self-esteem from them because we criticise our bodies, we criticise our hair, we criticise our legs, and so, little girls watch and they grow up where they have that kind of conflict of "if I'm not perfect, then I can't cope basically". So you... so the inner strife from scratch, from the start, if they're really addicted, how do you get them off it, and if you're supplying it I think it's immoral.'

Family involvement during the course of therapeutic intervention was regarded as important in facilitating changes within the heroin dependents family structures and life-worlds. Consistent and congruent boundaries and discipline from both parents was regarded as important in therapeutic family intervention.

'I think if people bring a person in for rehab, family should not be with. If family is with, then look, patient's withdrawal, he manipulates actually.'

'I think when a family or somebody that is involved, who is close to the patient, yes, I think the addict can manipulate through withdrawal as well. Especially a person who is not really serious about his rehabilitation.'

'Just like at home, both parents have to have the same kind of discipline, if they don't, it doesn't work because immediately one parent forgets the other, and if you don't have any discipline at all, then you basically have kids that run wild.'

An additional component that was considered integral to successful treatment intervention was that of good support networks and working with the entire support system, as opposed to a heroin dependent living in isolation. The role of co-dependents and significant others during therapeutic interventions was also highlighted as important within the process of psychotherapeutic / psychosocial intervention. The need to address co-dependence issues was also mentioned by the participants in the study by Dos Santos (2006).

'I think the first step in the whole therapeutic process is to find out what is his support system. Or I did find, or what my opinion is, on this matter, and out of my experience, is that usually the problem lies within the family. I'd say ninety-nine percent of the people I've seen in my practice are people who've got family problems, mostly within the family, but sometimes also out of the family like with a relationship with a boyfriend or girlfriend that went sour, and then the person cannot cope, because either he does not have the necessary support, or he hasn't got the adequate social skills to cope with hurt and pain and his own depression, and then he takes drugs as a way to alleviate the pain and suffering.'

'So yes, that's how I try to do my things and I focus on info, but never alone, there must be a witness. I never see an addict alone. His mother or co-dependant or girlfriend or family must be with for the first info session, afterwards I can see them alone, but when they want info then a witness must be with. I find that works for me, that info session I have with them can last for an hour and a half - that I only speak about addiction. I don't say to him that he's an addict or not. I say, okay, this is how addiction looks - this is what happens. Then, halfway through you can see he can relate and see himself within it. My point of departure is also that I want to learn from the addict, what can he teach me, then I get improved co-operation.'

'You get those that only work with the drug dependent. I don't believe that; because most of them are in a relationship - a lot of therapy does not look at the outside, and who else is involved.'

'I think somewhere in there, there needs to be a kind of family aspect to the intervention.'

'As a symptom, ja (yes), but it's very important that the patient or person will be treated with the knowledge and support of his family, or people close to him, whether it's his wife or children, or depends on his age. But I think the younger the person; the more important the family is in treating the patient.'

Intervening and resolving conflict or dissatisfaction within the workplace was also deemed important in order to strengthen the recovering heroin dependents employment support networks and to facilitate stabilisation of the recovering individual's sense of new identity and place in the workforce and world.

'Young people are emotionally and financially dependent on their parents, while people in their 20s and 30s are more independent, and then you also need to get the support of the employer or the firm or the factory that he works in, in other words, you have to go to the personnel management and try and get their support because most people who work spend half, or three-quarter or a quarter of their lives at their work, and sometimes people use drugs because they have a very unsatisfactory working environment, either they clash with the boss, or a colleague, and then they haven't got the interpersonal skills and, or they do not actualise themselves within their working environment, or they get bored or frustrated or both, and because they haven't got the ability to verbalise their feelings, and to discuss the matter, or to tackle the matter in a more normal way, they turn to drugs, and they escape from the work situation. You also get drug abuse amongst people who are highly skilled - like medical doctors, and they get treated to treat patients... like dentists and like surgeons, but they never get any form of training on how to cope with say for example, if they loose... if their patients' die or they cannot cope with the patient, they do not have the skills.'

'You tend to start missing your family and your friends, your support group, and that's why I start off by saying that support group, either peer group, family or employer is very important in the whole treatment process. Because after ten days when you sort of out of the withdrawal period, then people should start working on your way of seeing life, your whole perception of being, and your place in the world, your place... you know where do you fit in, and where did things go wrong.'

5.3.1.4 Social intervention

The study carried out by Dos Santos and Van Staden (2008) revealed on a social domain further negative consequences caused by heroin use, which was most notable in terms of the isolation, stigmatisation and loneliness experienced by heroin dependents. This isolation is likely to have been influenced by the fact that many were much less socially active when using heroin often due to a conscious avoidance of non-users, and the resultant change in social circles. The need to stay away from using communities, at times making a

geographic move, which support the findings of Dos Santos and Van Staden (2008) and Dos Santos (2006), was cited by the specialist participants as crucial to the recovery process.

'Same flat that she shares with another addict and the dealer stays two flats down the passage... it's a social problem.'

'Stay away from the old using community.'

'But it comes down to removal out of your environment.'

The extreme isolation and stigmatisation experienced by heroin dependents is obviously something that needs to be addressed, by engaging in intervention that can serve as a means of rebuilding (non-using) social networks. The inability of heroin dependents to work during heavy heroin use further exacerbates their isolation, due to a lack of contact with family / friends / work colleagues. The use of groups such as NA and after-care can provide sources of contact for recovering heroin dependents (discussed later in greater detail). The analysis performed by Dos Santos and Van Staden (2008) also elucidated various other factors required in achieving recovery including the need to have hit rock bottom, and the need for a good support network. Edwards (2000) reinforces this, stressing the importance of establishing a personal micro-environment that supports abstinence. For many individuals, groups such as NA and after-care support groups can provide such an environment. The study carried out by Dos Santos (2006) also revealed that a range of other factors in addition appeared to be influential in motivating participants in their recovery, including the fear of death from resuming the use of heroin, the potential guilt / shame associated with a relapse, as well as the support of significant others, and the positive effects of their change on others (for example, family, children). As mentioned previously, the importance of significant others in behavioural change is reinforced by numerous other researchers.

'The biggest problem then is the stigma that's attached, you get labelled, you a druggie, you're an alcoholic, and it's difficult because people do label you, people don't trust you, and then the others will treat you too nice, they treat you too special, and then you start feeling different, and then you're likely to relapse, because they make you feel... they want to make you feel welcome, but they overdo it, and by overdoing it you feel unwelcome, you feel you're not welcome, and you feel different, you feel out of place, and obviously also anxiety plays a big, big role in drug abuse.'

5.3.1.5 Practical intervention

Practical support in particular was beneficial to some participants in the study conducted by Dos Santos and Van Staden (2008), which is predictable considering the magnitude of practical consequences that occurred for participants as a result of their heroin misuse problem. Apart from employment problems, a neglect of other practicalities such as paying bills and keeping appointments, also emerged as a problematic consequence of use, which seemed to relate to a lack of responsibility, reported by the long-term voluntarily abstinent heroin dependents. This involved various irresponsible / negative behaviours, such as being unreliable, untrustworthy, deceitful, and engaging in criminal activity, most of which were conducted as a means to support their heroin habit. Equally, the findings of the present study emphasise the importance of helping recovering heroin dependents find employment that can provide a particularly useful substitution for the rewards previously found only in using heroin.

'Still doesn't have a job.'

'There must be a social worker and they must have jobs when they leave. A lot of them come in here, very clean and everything, six-weeks, they leave-to what?'

Other core requirements of recovery apart from employment, such as acquiring friends, recreational activities, exercising, and structuring time, were all cited as crucial aspects of recovery. One of the specialist participants spoke of the importance of recovering heroin dependents to maintain full lives so as to avoid the temptations of resuming the use of heroin.

'If you can leave drugs and you've got a job, that's a great beginning, but now you need friends, and it must be friends who don't drink and drug. Now you must get a hobby, and now you must get involved with a sport. Such things, the other thing that you would do is to get involved with Narcotics Anonymous. Whatever you do, one has to restore your relationships and make your life full. On a Monday evening you might go gym, Tuesday it's rugby, Wednesday evening you go walk, Thursday you go to Narcotics Anonymous, Friday evening you got a pizza and visit your mother or girlfriends or whatever. Saturday - you need to implement structure, because they don't want to do that. But it's necessary, because then you're back in all the old habits, because he's changed nothing of the old things.'

'Yes, look I think, the one thing that I think in any therapy is to get a guy to lead a normal life, as far as possible, especially concerning his eating habits, his interpersonal contact with other people, his interpersonal contact with groups, with institutions, like education, like his church or whatever he might believe in, and then extramural activities like karate, like sport. To really get him back in the community, back to normal life, and I think that means... the guy cannot, because he functions such on a certain level, and that was not adequate enough to keep him away from drugs, and now he's still taking drugs, he does not cope in society anymore, the guys rejected, he loses his job, and then he ends up in a clinic, it's actually like weaning a baby again. You have to start all over again from the beginning.'

'Some kind of employment because those are the things that also causes them to fall back. The people who haven't got the support systems, and no-one is looking at that, no-one. So for me that's the biggest problem - rehabilitating these guys.'

'You can also do that by directly looking at the cost to the patient in terms of loss of job, loss of income, illness and so on, associated with heroin addiction.'

Participants in the study undertaken by Dos Santos and Van Staden (2008) experienced numerous changes in their recovery. In the same way that using heroin seemed to produce changes in the user as a person, the process of recovery seemed to begin to restore those changes, altering the person, in terms of their lifestyle, identity and perspective. Many participants referred to identity restructuring that either excluded or depreciated old values, whilst others (presumably at earlier stages in recovery) expressed the desire to rebuild their lifestyle. The importance of variations between individuals in their specific requirements for intervention must always be taken into consideration.

5.3.2 Therapeutic interventions

The subsequent psychotherapeutic and psychosocial therapeutic interventions were discussed by the various specialist participants.

5.3.2.1 Cognitive Behavioural Therapy

Therapeutic interventions, specifically Cognitive Behavioural Therapy, were cited by the specialist therapist as an effective means of facilitating change in a heroin dependent.

'The method that seems to work in many areas where stimulants and opiates have been used, is a structured approach based on cognitive behaviour therapy strategies.'

'So it's still continual supportive psychotherapy, particularly cognitive behavioural therapy.'

'I think it's, I believe that we could have far more effective programmes - if we're looking at treatment, for example, inpatient treatment, while working on the 12-steps. I think it's far more... I think we need to bring in the cognitive behavioural stuff, we need to bring relapse prevention stuff and recovery skills - not just "I'm powerless". Everyone knows they're powerless - and that my life's unmanageable.'

A highly important component assisting recovery was the learning and use of a range of cognitive / behavioural strategies to combat / oppose the numerous factors / reasons for heroin use. These strategies were either learnt through treatment or over time by experience, and included strategies such as reducing high availability of heroin and other drugs / alcohol by avoiding users, changing social circles from users to non-users to reduce temptation, and using distraction to avoid boredom which may trigger use.

'You've got to have a clear base-line. You've got to identify goals that have to be achieved, and you have to map out a clear contract that will help the client and you achieve those goals. You have to have structured systems of identifying triggers for the addiction, things that lead to relapses. You have to offer or to look at what support systems that the patient has, at home, in the work place.'

'The Matrix programme is brilliant. Brilliant. We all know that. Hague has adopted it as their model... that's why I believe Matrix is so good, because it gives hard skills and it allows the 12-step to deal with 12-step stuff.'

The positive outcome of urine / blood testing as being conducive to recovery was also mentioned by the specialist participants, as well as being compliant with the Cognitive-Behavioural approach, because it provides a concrete means of measuring a recovering heroin dependents progress and helps to facilitate change / modify behaviour.

'Having brought that up to the surface, the patient will realise that he has a problem. So you give him this information, and you test him. He must be contracted into being tested, whether in hospital or out of hospital, so that he should be aware that there will not be follow-up on just questions, but there will be actual testing urine, to check if he is positive or not. That is important, that must be built into the contract. That changes behaviour. He will still sometimes try and bolt you on that, but this he knows, he can be tested at random. Now, this is an approach where you are not using any substitution, and it's a very difficult one to use in the sense that it is not easy to stop one form of using heroin - the craving is very strong, even after the first two weeks of stopping it, and they can become aggressive, they can even go and kill, just to make sure that they get the stuff.'

'Brief psychotherapeutic interventions, Cognitive Behavioural Therapy. Some strong analysis of triggers. Being prepared for relapse. Making sure that the person is tested and that you're not going into the risk of any severe problems. This seems to be the approach that should be encouraged for opiate addiction. There are other methods, which work at the higher brain level, surgical in nature, but I don't think I'd recommend these at this stage.'

'I think if the guy is clean, and he's over the withdrawal period, and when he starts seeing that he's not psychologically dependent, where in his mind, his mind set, he's subjective feeling is that he cannot come without drugs, I think then the therapist should change his whole therapeutic strategy to one of Cognitive Behavioural Therapy. I mean the guy... to actually teach the guy to think differently about things, and to find out what is his values in life, and I think, at that stage a very therapeutic relationship.'

5.3.2.2 Relapse / lapse Prevention

The findings of the specialist participants with respect to relapse appear to reinforce the importance of lapse prevention models such as those proposed by Marlatt and Gordon (1985), who advocate the use of a range of strategies to avoid relapse. In particular, lapse management strategies seem to be of considerable importance in preventing the lapse from developing into a full-blown relapse, and in combating the abstinence violation effect. One of the major reasons for lapsing was due to a failure to cope adequately with the heroin use disorder and associated cravings. The problem of relapse was strongly emphasised by Marlatt and Gordon (1985) and by Dos Santos and Van Staden (2008), and has subsequently been reinforced in the present study.

'Yes, but you want to achieve an ideal which is a drug free life... if we can reduce the relapse rate to 40%, some people are claiming 50%, which is quite good. We do know that even with that ideal in mind, 60% - 70% relapse rate is still there, so it's a protracted thing.'

The necessity of preparing patients for dealing with cravings and any potential relapse was considered to be of importance in terms of planning and implementing therapeutic and medical intervention initiatives. A particularly important strategy identified in recovery was the acceptance and expectancy of cravings and other problems associated with heroin dependence. An important aspect of Marlatt and Gordon's (1985) Relapse Prevention model is to teach clients to anticipate and accept cravings as a 'normal' conditioned response to an external stimulus, rather than seeing the urge as an indication of his / her desire to use. The model describes the use of various urge-management techniques, which can be adopted to deal with such cravings. Edwards (2000) also suggests that successful recovery involves avoiding relapse, and this can be achieved through learning various psychological skills, for example, through Cognitive Behavioural Therapy. Similarly, in Relapse Prevention models such as those of Marlatt and Gordon's (1985), one of the goals is to teach recovering substance dependents to anticipate the possibility of relapse and to recognise and cope with high-risk situations. Once high-risk situations have been identified, various strategies can be used to reduce the risks, such as learning more effective coping strategies, or if this is not possible, taking evasive action, such as leaving the situation when cues / triggers for use are identified (Larmier *et al.*, 1999).

'Now in terms of rehab - understand that heroin addiction is a serious form of addiction and therefore what we want to do is be prepared for relapses.'

Heroin, and substance dependence in general, is commonly assumed to be a chronic relapsing disorder (Gossop, 2000), and recovery often only occurs following a number of unsuccessful attempts. Due to this fact, the specialist participants were of the opinion that relapses should be regarded as a fairly normal part of the recovery process for most recovering heroin dependents.

'I don't think one should fight with a guy that comes and says that he had a relapse.'

The concept of heroin dependence as a disease that can never be completely cured was alluded to by one specialist participant. The elusive nature of heroin use disorders and causes of relapse was also identified as an under-researched area within the substance dependence field.

'It seems you open the tap that you can never close - you can close it a little bit, but you can't close it completely or it can shut off for a while on its own, but it will open on its own. That is the problem. We have not reached a point where we have predicted, I mean, where we can predict relapses. Why does some people relapse, and others don't relapse?'

'What I mean that's very dangerous about heroin, I mean, well I'm talking about what my patients have told me, is that after being clean for six months or years, you just wake up or they will walk in the street and they just get this desire. It's actually, they cannot resist the temptation, to such an extent some of these young girls, that they phone me 3 o'clock in the morning... "can we go to Vista, I'm going out of my mind and I'm going to lose it", or "I'm going to go to Sunnyside, walk down the road to get a fix", that's the problem.'

5.3.2.3 Narcotics Anonymous

Some specialist experts were of the opinion that Narcotics Anonymous (NA) has a role to play in long-term care / intervention for some recovering heroin dependents. However, it was emphasised that NA could not be regarded as therapeutic treatment per se, but rather as an active maintenance system for recovering heroin dependents.

'It has to be a part of. It can't be regarded as treatment. It's absolutely key because of maintenance. That's my take on it. That the 12-step forms a part of - but it cannot be seen as treatment. It's maintenance as well. No, it's not support, its maintenance. It's not treatment, because it stands for the individual, it's not structured, it stands for the individual as to how did I work it.'

The extract below indicates the dangers that can be encountered should recovering heroin dependents only rely on NA as an intervention, to the disregard of other forms of therapeutic intervention.

'I have another friend who's nine years clean and sober; she's never written anything through the Fellowship. She's a Mandrax addict. She's never written anything down; she says "I'm powerless over my addiction; my life's unmanageable... and let God deal with it". She's there, she's never dealt with anything, she's never written anything down. She's never, she recently had to be hospitalised because she had an obsession with a man, and I said to her "use the step-work as guidelines from Narcotics Anonymous - how's my disease... the first question in the step - work guide is 'how my addiction acted out recently; have I been obsessed with a person'...'"; she will not pick up that - and she's as sick as a parrot.'

Treatment intervention that included NA, such as the Matrix Model (see above), was regarded by some of the specialist participants as being of much benefit to recovering heroin dependents.

'The Fellowship is support; the meetings are support, but just doing meetings in and of itself is not on. I have a friend and she's twenty-three years clean and sober, okay, and she's got nothing I want. So she's now getting sponsees, and she is passing on what is sweet f.s. Now if you run a treatment programme like Matrix where you introduce them to NA, introduce them to - but it isn't just it.'

5.3.2.4 12- Step programmes

A twelve-step programme such as the Minnesota Model was regarded by two of the specialists as the ideal therapeutic model for the treatment of heroin dependence.

'When it was developed, when the Minnesota Model was developed, it was developed to dry out drunks. To give them some form of dignity, and it worked.'

'The Americans said this isn't working, so they said, wait a minute, let us look at where the difference is between this small group of people who are rehabilitated, and this big group that hasn't made it, and the only difference that they found was that the small group had a better point of departure - they could make better decisions. You choose whether you will smoke or not, or to drink, or to try something new.'

'The Minnesota Model has been used for ten years with success.'

The disease concept of substance dependence as well as taking responsibility for recovery were cited as important components of the Minnesota Model.

'The Minnesota Model is more focused on things like chemical addiction is like a disease. It's not a disease, but the fact that you cannot control it is passive. You're not responsible for having this disease; you're only responsible for what you do about it. Now who's you? The guy with the problem. Not his mother, or the welfare or Castle Carey or Magaliesoord or Noupooort. It's you with the problem, and often the porridge falls on the floor because we don't want to give the group the responsibility. He must take the responsibility to resolve the problem.'

Some of the potential short-comings of the Minnesota Model, such as the risk of rushing dependents through the various 'steps' or forcing recovering dependants to deal with painful emotions prematurely, was more likely to occur if only recovering dependents are used in programme as facilitator / counsellors, as opposed to professional staff.

'It works, the Minnesota Model works. But it doesn't work if it's only recovering addicts.'

'Also, in my experience, the Minnesota Model - um, they try and rush them through the steps. When you get to step four - that's when you start relapsing. Number one because they're very newly clean, so they're shaky anyway. That three month wall period comes in, particularly with stimulant users - you now have to dig into our past, your emotions are too painful, it's a key relapse time, and it's just all too painful - and use is the only way out of that, so, I have certain reservations about that.'

5.3.2.5 Spirituality and faith-based intervention

The role of spirituality in recovery from heroin use disorders was mentioned by a number of specialist participants as facilitating healing, change, finding meaning in life and oneself and encouraging hope. These findings that mirror the results in the study carried out by Dos Santos and Van Staden (2008), in which spirituality played a decisive role and was regarded as an essential factor within the recovery, proves true for most participants, some of whom referred to having undergone spiritual conversions / awakenings. As cited in Chapter 2, in other studies higher levels of religious faith and spirituality have been associated with abstinence, a more optimistic life orientation, greater perceived social support, higher resilience to stress and lower levels of anxiety (Heinz *et al.*, 2007; Arnold *et al.*, 2002).

'The patients' religion also plays a very important role, or whatever he might believe in, not necessarily religion as such, but his spiritual life, his spirituality.'

'No, well I mean your spirituality is that aspect of your life that makes sense out of everything, and if you don't believe in something you cannot believe in yourself.'

'Yes, it will be a source of hope.'

A minority of specialist participants advocated faith-based interventions. Many of these facilities, most of which remain unregistered, offer long-term residential treatment. The specialist participants who advocated such programmes felt that some of the centres offered disciplinary programmes that facilitated behaviour modification.

'I would like to purposefully advocate the Noupoot model. I am a Noupoot fan.'

'What I like about Noupoot is that there is a bit of military discipline. The army works like that. If the Corporal says to you "okay Monika, sit in this chair", nothing will happen to you - but if you sit on the other chair, then you can know I will make you run, or you're going to carry a log, or you're going to do something that's not enjoyable. But if you sat there from the beginning, nothing would have happened.'

One of the advantages of long-term residential communities mentioned by one of the specialist participants was the exercise that patients obtained during the course of their daily duties. This, according the specialist participant, was one of the inadvertent positive aspects of the long-term programme, aiding recovering heroin dependents to obtain the exercise that they need in order to promote recovery. Although there has been a great deal of controversy surrounding many of these unregistered facilities, a minority of specialist participants felt that they have played a meaningful role in the recovery process for some heroin dependents.

'Where they sleep, and where they eat, and where they have church, and where they work, is far apart. So these guys from when they wake up walk to breakfast, then they take the pit-bull terriers for a walk and he goes to church, then he goes back to where he sleeps. He's then walked 7km, he's then exhausted. The average city guy sees that as serious exercise. That evening he hardly has the energy to sleep - he's exhausted, he just falls over and he sleeps.'

'She gave up her human rights for 18 months - taken away from her. She was in Noupoot for 18 months, but today she is three and a half years clean, and is a 2nd year law student at UNISA. So what is so wrong with that picture? Another mother was in the newspaper... her son has human rights. She was in my office... "you can't send him to Noupoot". He's dead on the church steps - overdose. So which picture is prettier?'

A marginal number of specialist participants were also of the opinion that the minimal use of substitution medication was also one of the advantages of such programmes.

'Well, I mean you probably know that Noupoots' treatment is... you don't use other drugs to get them off the drugs that they're on.'

'They come to Noupoort and there is nothing, there are no other drugs.'

5.3.2.6 Community based / outpatient intervention

Various specialist participants advocated treating heroin dependence on an intensive outpatient basis. The cost benefits of outpatient programmes is highlighted in a quote below, illustrating the financial accessibility of such programmes, particularly with regard to advanced heroin dependents who have little recourse to financial resources.

'I believe heroin addiction can be... if it's a medically managed detox, it can be treated on an outpatient basis as long as it's an intensive outpatient and mainly that should be a six year period.'

'Ja (yes), I think you're very privileged with guys who've got fully paid houses, bonds, cars, employment; which we haven't got. So those others are actually very protected, and they're got everything when they come out. The guys who come to see us have got nothing.'

The opinion was held that outpatient treatment, as opposed to inpatient / residential treatment, is more realistic in that it facilitates recovering heroin dependents to deal with demands and triggers within their environment without succumbing to heroin. Outpatient programmes are thus helpful in that they facilitate recovery by testing the ability of recovering heroin dependents to remain abstinent within the community. Support from scientific / academic sources for outpatient programmes was cited as providing credibility for such programmes.

'Inpatient treatment is expensive, and doesn't test if the person can be out in the community without suddenly using the stuff; that is, can you control the craving within a community where there are a lot of triggers, knowing that there is support available.'

'So the best test, the best therapeutic test, is actually to give them exposure so they're out there in the community, they meet with some people they used to use the substance with or they see them. They have to change their lifestyles, avoid going to certain meetings, going to certain places because that's where you meet these people and they're likely to use the substance.'

'Anyway, the (Medical) Research Council said that worked.'

The use of outpatient facilities that supply supervised pharmaco-therapeutic interventions, such as the outpatient methadone maintenance programmes in the United Kingdom, despite the association with accidental death, was referred to as being very beneficial in assisting recovering heroin dependents adapt to their new life-styles while still being supported and monitored by outside agencies.

'But outpatient treatment is the best - now, if you go back to the methadone programme, a few years ago I visited centres, methadone clinics - outpatient methadone clinics, outside London in an area called Brighton, and we found that patients were not given the tablets go and take at home. They were expected to come to the clinic every morning, because the methadone substitution programme, whilst still okay, has been associated with some accidental death.'

One of the noted drawbacks of residential treatment, especially long-term residential treatment, was the risk such programmes hold for inadvertently institutionalising recovering heroin dependents and not facilitating their ability to cope with the outside environment / world when re-entering mainstream society.

'It's that having to stay locked up for years I think is just a load of baloney. It institutionalises people.'

The need to offer regular structured outpatient programmes which enhance self-efficacy skills was regarded to be of fundamental importance in the rendering of such services. Formulating contracts with clients which stipulate conditions of treatment, such as frequent regular random urine testing and possible consequences of positive test results, was mentioned as useful in facilitating behavioural change.

'It depends on how many times they come. I believe three times a week. What we try to do it improve their skills so the programme aims to build up skills, better communication, better conflict management, better stress, because that's mostly why they fall down - they all fall back, so that is what we're doing.'

'If there is a cash flow problem, job situation, the conditions you lay, we can help you with this but, you know, clearly if you are found to be positive, you are going to loose your job - so, that's some conditions you could put.'

Compliance with outpatient programmes was found to be more effective for heroin dependents that have an active support system. Lack of compliance to outpatient programmes was associated with heroin dependents being arrested and incarcerated by the police, and also heroin dependents that come from disadvantaged backgrounds.

'What we see is that they do come the first week and then maybe disappear for a week, and then come back. There are the ones, the younger ones that still got employment and they still got family sort of forcing them to come or making sure that they drop them off. They come on a regular basis.'

'Most don't stay longer than six sessions, and most of my patients relapse within six months, for some kind of reason. So it is more difficult for them to pitch up. The other thing that we start finding now is that the police arrest them on the street for being a danger to the public - even though they don't have any medication, needles - nothing on them. So they arrest them now most of the time they are on their way to the hospital so they can't get their medication because they were locked up for the night. They can't come to therapy because they were locked up. So that's another problem for the guys that stay on the street.'

5.3.2.7 Toughlove

The role of Toughlove, in conjunction with other rehabilitative initiatives, was regarded as an important asset in assisting families and significant others of heroin dependents. The importance of involving parents, extended family and significant others within the intervention process was regarded to be of key importance in the holistic intervention for heroin dependents (as discussed above), not only in setting boundaries for the dependent, but also in facilitating insight for family members / significant others.

'As you know the addict's so manipulative that he immediately knows that one parent is not involved, so we try and get both parents into ToughLove. So the support programme is really, really very important.'

'I think rehab but I think it also has to be with both parents involved.'

'I find that the success rate, if you don't have the mother and father involved and preferably siblings, it doesn't work that well. It isn't very successful, but, ja (yes), it has to be both parents and preferably siblings.'

'Ja (yes), and especially the grandparents are usually the kind of soft touch, if you want to put it that way, and to teach them that Toughlove and rehab is not the worst thing in the world.'

The use of behaviour modification techniques, support and addressing co-dependence issues was regarded as an effective means of facilitating change within the family structure.

'Also the whole time you stress that it's not you we don't love, it's the behaviour. So the support is there for the addict all the time, even though tough measures are taken, they know that it's the behaviour that you don't like.'

In a desperate attempt to help heroin dependents who have failed to respond to mainstream rehabilitation initiatives and programmes such as Toughlove, some specialist participants spoke of knowing parents / significant others who resort to offshoot support groups which are typically managed by radical individuals. Detail with regard to the workings of such support group was provided by one of the specialist participants.

'In our groups, in the Toughlove groups, they've said well that worked, you know, for my son. It hasn't worked for him to go to Noupoot, to go through their tough programme. But I must also say that that's after they're maybe done two stints at Noupoot and then come out and they've relapsed maybe the third time and

the parents have said "okay, let me go this route". Well, basically what he does is he takes the parents, he does programmes with the parents, he does programmes with the addicts. He places the addicts' under total house arrest, under his parents care. It's similar to Toughlove, but the point is he's putting the whole, the whole family under house arrest, which I feel is very unfair, and whereas when they go to rehab, at least the family is able to put their lives together again.'

'Well, in the sense that every time the addict... every time the mother wants to go out, she's got to take the addict with. If she wants to go shopping, she has to take the addict with her. If they want to go to movies, they have to take him with her. So he has to be involved with everything, otherwise they can't go. They cannot leave him at home alone. So he's under constant supervision under his parents. So the siblings all suffer as well.'

The use of more severe corporal punishment by these extremist groups was cited as problematic and unethical by numerous specialist participants.

'My personal view - I don't agree with it. There's been a lot of stories about it. They use quite bad corporal punishment apparently, which I won't agree with that, 'cause that's totally against the ethics of ToughLove. Not even parents should beat their children because all you're doing is you're - first of all the addict doesn't absorb it because he's an addict you know. You have to treat him like a cancer patient. You can't be with him, he can't help it at the time - it's an illness, hey, we don't agree with it at all. You're not treating the problem; you're only treating the symptoms.'

5.3.3 Pharmacological intervention

The need for some kind of substitute pharmacological intervention was reported to be necessary for many participants in the studies conducted by Dos Santos and Van Staden (2008) and Dos Santos (2006). Substitute pharmacological intervention was generally supported by the specialist participants with a medical background. However, most of the remaining specialist participants reflected that a significant proportion of recovering heroin dependents maintain their abstinence with primarily supportive therapeutic input, a view that was also supported in the study undertaken by Dos Santos (2006).

'If it's not at all possible to come off it without using another drug - absolutely.'

'Some people don't need to use methadone or buprenorphine; they continue and survive basically with supportive psychotherapy.'

Two alternative modes of intervention were mentioned by a specialist participant, namely no use of substitute pharmacology - implying the use of only symptomatic pharmacotherapy, and the alternative, substitute pharmacotherapy such as methadone and buprenorphine.

'But once patients have been admitted, then you have to decide what it is you want to achieve. There are two processes; one - stop them from using heroin completely without substitute medication... hence the alternative is to use substitution medication.'

'I believe in pharmacotherapy on a deep level. So while people are beginning to get clean, maybe the stuff like naltrexone, the other one beginning with "s" - that I can't remember.'

Some of the specialists felt that pharmacotherapy intervention should not be of a long duration, and that the use of medication should only be administered during the heroin withdrawal syndrome.

'So I think there has to be medical, safe, reasonably comfortable medical detoxification from heroin. Obviously the complications of heroin are medical, but I think it needs to be quick. I don't think it needs to be drawn out and long. We do a five day heroin detox which I think is the safest and comfortable and I think longer than that as an in-patient is inappropriate because I think it is just wasting time and resources as people are not going to start the emotional and psychological work while they're detoxing.'

'We medically ... I believe medication has got a role, a short period, we don't give methadone say longer than five days, plus minus, but I think there is a role.'

The aspect of sleeping difficulties was cited as another important symptom that needed to be addressed pharmacologically, because sleep deprivation was regarded as a high risk factor for relapse.

'Ja (yes), also with the withdrawals, they got a lot of backache, headaches a lot of the time - and then the sleeplessness. So I believe... also what we see, is the moment they don't or they stop sleeping, they also fall back - because that's the main reason for falling back - is not sleeping at night, and then not being able to cope the next day. So we monitor that as well in the beginning.'

5.3.3.1 Symptomatic pharmacological intervention

Some of the medical specialist participants were of the opinion that the first line of pharmacological intervention (especially for less chronic heroin dependents) should consist of providing medication according to the patient's symptoms. This type of intervention was regarded to be of particular benefit for those not encountering severe withdrawal symptoms.

'I think one must work according to the patients' needs. You must tell the addict that you are going to treat him according to his symptoms.'

'If he does not withdraw severely, you should treat him symptomatically, if his stomach aches, or if he can't sleep, or if he craves.'

Standard benzodiazepine medication was advocated, as well as attending to the nutritional status of the recovering heroin dependent. The administration of supplementary vitamins, such as the B-complex vitamins, in particular thiamine, was supported. Clonidine was also regarded beneficial to heroin withdrawal symptoms and in treating heroin craving.

'It would mean that you would treat the withdrawal symptoms by using any one of the standard benzodiazepines, and you also have to attend to the nutritional status. Many of them don't eat, so you need to replace... they need to give them supplementary vitamins, thiamine and B-complex vitamins.'

'I think that the regime that our doctors prescribe is the... it's Librium a quarter three times per day, together with the Dixarit (clonidine), it really helps, and for the cramps, Scopex.'

'That which we presently use - sleeping medication, Librium three times per day, Brazopam for the cramps and Dixarit (clonidine) for the craving. I really think it's adequate.'

Other medical specialist participants felt that the use of symptomatic medication, such as benzodiazepines, is not effective for the long-term maintenance of a recovering heroin dependent.

'I don't use benzo's; no... it might help with the withdrawal, that's all.'

The use of medication, such as anti-depressants, to simultaneously treat co-morbid symptomology, was supported within the scope of this study.

'So I believe in anti-depressants with it, because they fall down - way down - they get depressive afterwards.'

In instances where withdrawal symptoms presented as more severe, uninterrupted pharmacological treatment (such as with an opiate substitute) was generally supported (see below).

'If he begins to withdraw severely, one must treat him uninterrupted for ten days.'

5.3.3.2 Methadone

Methadone as a substitute / harm reduction medication in treating heroin dependence was mentioned by numerous specialist participants as a mode of pharmacological intervention, despite controversies. However, most specialist participants held the view that complete opiate abstinence should be the ultimate goal in any methadone maintenance programme. Some specialist participants mentioned their preference for methadone, above other medications, for the pharmacological treatment of heroin dependence.

'There are those who need further introduction to methadone to completely block the effects and the craving.'

'I think what methadone maintenance does is harm reduction, harm both to the individual and to society.'

'But with the goal that he will ultimately completely abstain?'

'We prefer methadone. We find very little of that with methadone, so we've actually stopped using Subutex because of the risks.'

The use of methadone in low doses, to take the 'edge off' during detoxification, was regarded as a meaningful intervention in the treatment of heroin withdrawal and cravings. The protocol for methadone usage was delineated by one specialist participant; however, it was conceded that the dosages were subject to medical assessment and monitoring by practitioners.

'So I think methadone in low doses so that as they come in they see if they do quite well with the withdrawal and five days later the detox is over... the maximum milligrams that many people get to help them is 2mg of physeptone from day one, which is very low, where obviously it will take the edge off, it will help them, but it won't stop them from withdrawing.'

'When you use methadone, you don't feel the strong craving because you've blocked the effect of opiates completely.'

'The protocols are 15ml x 3 a day, but it's 2 and 5, so it's actually 6mg of physeptone 3 x per day, reducing over five days. We will give people who are withdrawing 45mg in stack-dose to stabilise them. Obviously it's up to our doctors to do an assessment, to determine intervention criteria for the stack-dose.'

The risk of death attributed to methadone was discussed by one specialist participant, who elaborated that many deaths initially regarded to be methadone related were later attributed to other mitigating factors, such as alcohol use together with methadone, which negatively interacted with the methadone consumption (see discussion in Chapter 3, p. 51 (3.1.7 The mysterious case of the heroin overdose).

'Whether it was death because of the medication itself - so far it's assumed that maybe the particular clients had other problems that perhaps interacted negatively with the methadone, or they took methadone and they still used heroin or something else you know.'

Some specialist participants were of the opinion that methadone should only be administered to severely chronic heroin dependents, and the use of methadone should be the exception to the rule. The use of methadone was also regarded by some specialist participants as a substitute that only prolongs the dependence syndrome.

'It's not a thing for every heroin addict. Of the cases dealt with in this clinic, I would say it's approximately 3%... okay, there may be certain cases that are very severe where you would intervene maybe with physeptone... but it must be the exception.'

'I don't really have a problem with it, but the doctors' feel that it lengthens the addiction, you basically just continue with a substitute. What's that other thing that they use? They bluff themselves, yes.'

One of the drawbacks of methadone, mentioned by a number of specialist participants, is its high dependence potential and high sugar content which can cause tooth decay for those on long term methadone maintenance.

'They get addicted to it very much. It's a higher risk, yes... and it's not as effective. Not nearly as effective.'

'We've got physeptone. It doesn't work as well as Subutex. I think that there are more relapses, and it's also not good for their teeth. Lots of sugar. Overseas, there's methadone tablets and things... but we haven't got it.'

A significant proportion of specialist participants were of the opinion that methadone is needed and should be used in cases of chronic heroin dependents that have poor motivation and minimal resources. Other less chronic heroin dependents should be encouraged to abstain completely from all psychoactive substances.

'I think in terms of people that can get well, should get well, and should be offered the opportunity to get well. I think half of them fail, then methadone maintenance is an option for long-term, poor prognosis, badly damaged...'

'I think maintenance programmes have a place, as I said before, for the long-term heroin addict with little motivation to change and few resources.'

'It's still working in the UK, but there are people here who have different views on this particularly, they are very cautious about methadone substitution.'

The use of methadone maintenance programmes in South Africa occurs mainly in hospital or rehabilitation centres. The use of outpatient methadone maintenance programmes in South Africa was cited as being rare. One specialist participant mentioned that this was due to the possibility of substitution with or misuse of methadone, and the potential inadequate monitoring of methadone administration at outpatient facilities. The use of methadone on an outpatient basis, despite the difficulties to monitor, was deemed a useful mode of intervention by numerous specialist participants who regard heroin dependence recovery to be a protracted process.

'In this country, South Africa, methadone substitution has been the main substitution mainly in hospitals, or in treatment centres, but it's not yet recommended for outpatient use, because addicts tend to discover that methadone still gives a bit of the pleasure of heroin. It doesn't give them the pleasure as such, but you know that if they have a serious relapse, and when they take it - the craving stops.'

'Methadone maintenance? I think you're substituting the problem. It's very difficult to administer on an outpatient basis because what happens is a lot of them... if you give it too early in the morning, they start using at night to sleep again. So I think it's just a temporary solution. It won't give them the high, that's why it's better - that's why it's better than the high they get from heroin - but they do use it to get a better high, so ja (yes), long-term - no.'

'It's a protracted process, but what is encouraging is that it can be done on an outpatient basis.'

Outpatient clinics were regarded as being of potential benefit not only in the administering of methadone, but also in assessing a recovering heroin dependent on a regular basis over a protracted period. Having a responsible person to monitor the methadone administration was cited as a necessary precautionary measure in the administration of the medication on an outpatient basis.

'Methadone clinics worked well to provide and there was another form of intervention; the use of methadone clinics not just to dish out tablets, but to briefly assess where the patient is on a given day.'

'They come here and they collect it, everyday if they haven't got a responsible adult, or someone who can take responsibility for that. If they're got that, their parents, or their girlfriend that's not using heroin will give the medication - they give it accordingly and take it as prescribed.'

In administering methadone as a substitution medication, the need to stipulate to the client that the ultimate goal is total abstinence was regarded as essential to service delivery. The combination of psychotherapy and substitute pharmacological intervention was also cited as beneficial and crucial, together with a contract specifying the expectations of intervention from both the therapeutic specialist and client.

'Ja (yes), as far as I know, they wean it down.'

'It's a kind of an all or none kind of substitution medication. So, you can either use that regularly, but if you use that you are hoping that you will slowly wean the person off, and off heroin completely. There must be a contract that specifies that, and all those things happen if there is a contract that specifies that. All those things happen faster if there is a combination of medication and psychotherapy.'

5.3.3.3 Buprenorphine

The use of buprenorphine, a partial opioid agonist, recently registered for the treatment of opiate dependence, was cited by the numerous specialist participants as becoming more popular in the treatment of heroin use disorders. Its pharmacological properties make it well suited for the management of heroin withdrawal - it alleviates or prevents withdrawal symptoms and reduces cravings in dependent heroin users; the withdrawal on ceasing buprenorphine appears to be less severe than from heroin or morphine; and short courses of buprenorphine appear to be associated with minimal 'rebound' withdrawal (increase in withdrawal severity) upon ceasing buprenorphine (Kakko *et al.*, 2003). A range of post withdrawal intervention options available following the use of buprenorphine was also discussed by the specialist participants.

'Ja (yes) - I feel that Subutex should be used.'

'Pharmacological... Subutex. It's a blocker, it takes away craving and you can use it for withdrawal, and they can carry on and function like normal people. Some people use it for six months; others use it for a lot longer. It's individual.'

The partial antagonist action of buprenorphine implies that the total effect of any opiate is not totally blocked, so some elated effect is still experienced.

'The new approach, well not new, is giving a partial antagonist - that is buprenorphine... now buprenorphine is a very good partial agonist in the sense that when you give buprenorphine, you don't totally block the effect of the opiate. Okay, they're not taking the opiate, but it still gives them a little bit of the pleasure of opiates.'

'Subutex. That sort of thing. So I believe that's really very useful to assist people.'

In a study conducted by Lintzeris *et al.* (2002), 114 dependent heroin users with no significant other drug dependence, medical or psychiatric conditions or recent methadone treatment, were recruited to determine whether buprenorphine is more effective than clonidine and other symptomatic medications in managing ambulatory heroin withdrawal. Findings indicated that buprenorphine is effective for short-term ambulatory heroin withdrawal, with greater retention, less withdrawal discomfort during withdrawal; and increased post withdrawal treatment retention than symptomatic medications (also refer to Kosten & Klebber, 1988) or, alternatively, buprenorphine can be continued on a long-term basis as substitution maintenance treatment for those who fail to complete withdrawal or relapse quickly to heroin use (Lintzeris *et al.*, 2002). The resulting effect of buprenorphine was regarded to be more gradual and less abrupt than that of methadone.

'But buprenorphine seems to have kind of provided another answer, it's not an abrupt stopping and dealing with strong craving. It's a gradual kind of stopping.'

Buprenorphine was also regarded as useful in combating the craving for heroin. The suggestion was made by a specialist participant that buprenorphine could be used in the intermediary phase between heroin

dependence and methadone maintenance, with the ultimate goal still being complete abstinence, weaning a heroin dependent off buprenorphine and then introducing methadone, and ultimately weaning him / her off methadone.

'So, it's not just an all or none thing, but it reduces the craving also, so it's a slow process. Some people say, instead of moving from opiate addiction to methadone substitution, perhaps the intermediary phase could be a partial agonist such as buprenorphine, and then when you wean them off buprenorphine, you introduce them to methadone programmes again - in lower dosages - with the aim of weaning them off completely.'

The combination of buprenorphine and naloxone (Suboxone) was also cited as being of particular benefit. Suboxone is a combination of buprenorphine and naloxone (an antagonist used to countereffect the effects of narcotics). The drug eases heroin withdrawal symptoms (buprenorphine) while 'blocking' the effects if heroin is used at the same time. This, however, does not mean that an individual cannot overdose on heroin; the individual just cannot get 'high' off it. The commencement of naltrexone during or soon after the cessation of buprenorphine has been described by various researchers (see Umbricht, Montoya, Hoover, Demuth, Chiang, & Preseton, 1999; O'Connor, Carrol, Shi, Schottenfeld & Kosten, 1997; Kosten & Kleber, 1988).

'Australia now uses Suboxone. It's Naloxone and Subutex, which is even better, but we haven't got it.'

While the use of buprenorphine was cited as useful in combating heroin / opiate craving, concurrent psychotherapy was regarded as key in the holistic treatment of recovering heroin dependents.

'Now you have also reduced the craving. That's why buprenorphine is recommended as a partial agonist. That still has to go with some form of psychotherapy.'

'The first 18 months, if you can control the physical symptoms, with Subutex and Suboxone, or whatever, and keep his head right for 12 months, then you've won the battle. I think so. That's why I say it's both.'

A minority of specialist participants felt that buprenorphine maintenance was too risky to use in treatment due to misuse of the medication. Buprenorphine's ability to initially completely alleviate heroin withdrawal symptoms, but then manifest with severe buprenorphine withdrawal symptoms later, was also cited as one of the risks of the medication. While other specialist participants felt that buprenorphine, similarly to methadone, only prolongs the dependence syndrome.

'What we find with Subutex is that people get, they quite like it. They get quite attached to it. Since we've been using it, we've found that a number of our clients have gone after treatment, when they've relapsed, to various doctors and tried to mission Subutex, and then they've used and misused Subutex as a drug of choice.'

'Not something like Subutex for two years, because we find that they also sort of fall-back on Subutex. So you are substituting one for the other.'

'The other reason why we stopped using it is because with Subutex, people feel wrapped up for the five days, and as soon as they stop it they go through hectic withdrawal. Whereas with methadone they don't feel that comfortable the first few days. They actually suffer the first few days and by the time you stop it, they're fine.'

'We get a lot of enquiries from people that want to come for treatment, but say that they've been so long on Subutex... but they just lengthen their addiction because they are bluffing themselves.'

5.3.3.4 Apomorphine

Only one specialist participant, who had a medical background, was familiar with the use of apomorphine, which has been used in the past to treat severe opiate withdrawal.

'I don't know much about Apomorphine. I do know that some people found it useful as an intermediate process in dealing with serious opiate addiction. But I'm not familiar with its use.'

The use of this pharmacotherapy, as illustrated in the quotes below, remains obscure, unknown and elusive (see discussion in Chapter 3, p. 72). Most specialist participants favour and do not question mainstream pharmacological interventions such as methadone and buprenorphine.

'It's not a substance we're encountering a lot, or using or encouraging in any way, because... in what context are you asking about it?'

'Not completely, no (not well acquainted with the use of apomorphine). Ah ah, we don't actually use it. I think in Australia, I think Australia used it for awhile.'

'I've never used it, but I would still rather use Subutex, for morphine dependence as well...and codeine, yes. Yes, all the opiates.'

'Yes, I watched a TV programme the other night. Is it like LSD? Not?'

5.3.4 Criticisms of pharmacological interventions

A specific negative experience of pharmacologic intervention in the studies carried out by Dos Santos and Van Staden (2008) and Dos Santos (2006) was related to substitute prescriptions, and in particular methadone, which participants had usually received in earlier stages of their heroin dependence. Some of the participants viewed substitute prescriptions such as methadone negatively and of no benefit in recovery, with other participants experiencing extreme withdrawal from methadone. Intravenous buprenorphine misuse was also reported. In the present study, a few incidents of the intravenous misuse of buprenorphine were reported by the specialist participants.

'I've only had one that's injected Subutex.'

Similarly, negative views of methadone were expressed by some of the interviewees in McIntosh and McKeganey's (2002) study, although a significant proportion viewed methadone as a miracle drug that had saved them from the depths of their heroin dependence. Although a controversial issue, research evidence does indicate that methadone and buprenorphine can make a positive contribution to reducing risk behaviour and assisting recovery (Pearson, 1987). In the study undertaken by Dos Santos (2006), participants who had previously received substitute prescriptions such as methadone and buprenorphine, emphasised that problems arose due to the lack of adequate supporting therapy and the common occurrence of substitute prescriptions being withdrawn too quickly, and as a result participants often felt unable to cope because they were withdrawn and returned to their original heroin use. Such a common experience has powerful implications for substitute prescribing practices. Criticism against the use of pharmacotherapy was voiced mainly by specialist participants without medical training, some of whom shared the sentiment that long-term recovering heroin dependents who are not on any form of substitute maintenance programme were more likely to remain completely abstinent from any form of psychoactive substance. The use of opiate maintenance programmes were generally regarded as forms of substitution, without addressing the underlying / causal psychological / emotional and social factors pertaining to the recovering heroin dependent. Some specialist participants were of the opinion that use of substitute prescriptions should be used with discretion and only as the exception to the rule.

'We have to get away from the perception that it can be tapered off, in my books, that thing doesn't wash. But I don't have research to prove it... the clean addicts that I know - they just stopped.'

'Look and see if you find someone who has come right - I'll say "alleluia, use it". But I haven't seen one. Those that come right don't use medication. Here and there they might have used something for a psychiatric condition or depression condition.'

'I would rather say preferably not, but if you absolutely have to, if you absolutely cannot avoid it and there is no way, then you would have to. But preferably not because you're teaching him, just like you teach a child by being abusive toward them, that that's the only way you can cope with problems - that well, let me use one drug to get off another drug.'

'Like giving a Disprin, the headache goes away, but what about underneath that?'

The negativity of prolonging dependence was cited as a prominent criticism against the opiate maintenance programmes. The analogy of substitute alcohol for alcoholics was cited by one specialist participant, who felt that pharmacotherapy should only be used for medical complications or dual diagnosis purposes and not for maintenance purposes per se.

'So who you're bluffing now? Do you want to tell me you're not addicted, just because the doctor gives you a prescription you're not addicted.'

'I am not convinced that we say to the alcoholic, to stop you must drink 11 beers tomorrow, and 10, and 9 and then 8 until you eventually stop. I don't know if you work with alcoholics like that, I don't know of it. You say "listen pal, I see you're addicted - stop!" You don't say tomorrow I'm putting you on a drip or something else in your veins. I realise that some exception occurs for those with medical issues - but it's not everyone who has medical complications or is a medical risk. Now we come to heroin, now we take these addicts to all these medical doctors. If you're addicted to Black Label beer - then we put you on whiskey. If you're addicted to Kraft - then we try Castle lights. All the things that they prescribe - methadone and all those things - is family of the same plant group. So who you're fooling now? How do your heads work? It can't work... I am not at all supportive in that now I'm on Black Label beer, now give me whiskey. Or I'm on whiskey; give me Castle light - now I'm okay. Because what will happen... I will just later reach out for three Castle lights for every Black Label that I desire. So in the end the thing snowballs.'

'... he doesn't hear me. I ask him, "now the medication that the doctors given you, what's it going to do?" No, he doesn't know. "Now what must the doctor do, what must he give to you? Why must he give you medication? You don't want to hear me, do it your way, but I'm telling you it won't work, because we've never done it with alcoholics". We've never said to an alcoholic, "oh, okay, as second prize then drink a sherry and its okay". He will not stick to that sherry.'

'I think there is a difference for when you need medication due to a bipolar disorder, or if you have a primary diagnosis, okay, these are exceptions. Those people then need medication.'

'Someone who is perhaps a medical risk, such as hyperventilating or suffocation, or jerking, then "siekte troos" (pampering the sick) may not be sufficient.'

With regard to the social context in terms of the development of heroin / opiate dependence and with regard to heroin / opiate dependence, remission was cited as an important aspect to be taken into consideration when planning intervention, as opposed to only considering pharmacological maintenance programmes. One specialist participant also spoke of heroin substitute programmes for morphine dependents such as those utilised in the Vietnam and Second World War, now regarded as ludicrous. The view was held by the specialist participant that opiate medications such as methadone and buprenorphine will someday be banned, just as heroin, owing to its dependence potential.

'I can't prove it, but I heard somewhere, I don't know where, in the Second World War a bunch of soldiers got addicted to morphine... they were then given heroin to come off the morphine. They then saw that there were more guys addicted to heroin than morphine. So who you're trying to fool?'

'I say, what I think will happen in the future, is that Subutex and these things will also appear on a banned list. Mandrax started as a legal substance until relatively recently, now it's been taken off of the market.'

'I can predict that in ten years from now Subutex will be on a list of banned substances. It's ridiculous to recommend it to people.'

The likely financial vested interest of pharmaceutical companies was also regarded as a potential factor in the advocating and aggressive marketing of maintenance programmes, while the high costs of buprenorphine were mentioned as an example by one specialist participant.

'I have a woman who's come out of Magaliesoord; by the way she was already two years clean from heroin, big cake and tea and everything - without medication. Then she began knit one, slip one, you know, and then in the end she lost it completely. We sent her to Magaliesoord again. For the first time, she was perfect for a month, a month and a half. Then she began to itch. She went to see a certain doctor, that I hear now is out of the country - temporarily. I don't know, I hope I don't see him ever. Okay. Then she went to see this guy, and he placed her on Subutex, and she stays at her mother. She struggles to get through the month, although she has no flat to pay, she has no expenditures. The brother runs the house with the mother's pension. Now for a social worker, R12 000 is a lot of money. She blows it, she does short term insurance. She's walking with her feet, she doesn't have a car. All the money goes to the pharmacy, or for the doctor. Those pills work out to R70 for one pill.'

Certain specialist participants stated that substance dependents will attempt to obtain medication due to the nature of their condition, and may over-emphasise the fact that they need medication, displaying their need for medication as a need for emotional pampering. The specialist participants, who held such a view, felt that with sufficient care and attention a recovering heroin dependent can be treated with minimal medication.

'The addict will differ from you. They say, "ooh, I can never do it without that stuff". So you see, the addict will try.'

'I'm not convinced that they need medication, "siekte troos" (pampering the sick) is a phrase that could be used. "Siekte troos" (pampering the sick) can also be a Smartie (sweet); you must just think it can help. You know, it doesn't really need to help, he must just think that if he takes the pill, it will help, and someone must just say "hey shame, how're you feeling this morning? Are you okay?" Just a little bit of pampering.'

'So, any mood altering, mind altering chemical... this is how people easily get addicted, and these are the things you need to avoid if you want to recover. You can't say that you have to take a substitute, it's "siekte troos" (pampering the sick).'

'Now an English guy ended up with her... condensed milk can do as much as the best medicine given at a clinic. These yellow drips put on a guy... you could just as well give condensed milk or caramel.'

The majority of specialist participants were of the opinion that heroin dependence recovery is facilitated by individuals making a decision to abstain as well as by the minimisation of any ambivalence with regard to abstinence / recovery. The crystallisation of a decision to abstain, in one specialist participant's opinion, reduces the need for substitute medication. These findings mirror that of the long-term voluntarily abstinent heroin dependents in the studies carried out by Dos Santos and Van Staden (2008), and Edwards *et al.* (1987), who argued that recovery from heroin use disorders inevitably involved acceptance of an abstinence goal.

'I say no. I say addiction has to do with taking a decision. You decide to smoke, if you want to stop - you decide to stop. When will you stop smoking? When the doctor says "listen here Monika, I think you have a lump in your lung. Oh, what now? No, stop smoking". So, it's a choice.'

'So you must think about what you're doing, and you must make a decision. So you can make the decision that you don't need medication.'

Despite the arguments against substitute prescribing, there was general consensus that medication was of use for some recovering heroin dependents struggling with the heroin withdrawal syndrome.

'I would for withdrawal... if the people involved in the rehab feel that this particular person would not be able to go through the withdrawal without having other medication, and obviously the other one to get them off the drugs... a lot of parents have found it very successful.'

Based on the outcome of this study and the previous study conducted by the author (Dos Santos & Van Staden, 2008; Dos Santos, 2006), pharmacological intervention continues to play an important role in heroin dependence recovery, since the phenomenon involves some degree of physical dependence.

5.3.5 Incarceration

The lack of sufficient medical and rehabilitative initiative within prisons, for those awaiting trial and sentenced prisoners, was regarded to be a serious problem within the Correctional Services structure in South Africa. Heroin dependents who struggle with withdrawal symptoms seldom obtain necessary medical / pharmacological intervention. Furthermore, heroin dependents serving long-term sentences rarely obtain any form of specialised intervention for their syndrome. Despite not receiving the necessary medical / pharmacological intervention, many recovering heroin dependents, according to the specialist participants, are known to have survived the ordeal.

'Addicts in New Lock, we've had numerous conversations with Correctional Services social workers. No one is helping the addicts in awaiting trial prisons. So they don't give them medication - so they're more aggressive - they get in more trouble and so they're seen as someone who is making trouble, and not someone who is withdrawing. So ja (yes), the programme for people coming in that are tested positive - I don't think there's any. The one being arrested for needles, medication or a positive test - they should at least get medication in New Lock, because some of them sit there for three months. It's terrible.'

'But heroin addicts get locked in prison, and they don't die, they survive.'

The incarceration of heroin dependents displaying no co-morbidity or anti-social type personality traits was generally held in disdain by the specialist participants. There was consensus amongst the specialist participants with regard to the establishment of community programmes and rehabilitation initiatives / diversions instead of incarceration. The need to lobby for government to be more proactive in their stance toward heroin use disorder rehabilitative / diversion initiatives was viewed as a necessity.

'That people can say I am an addict, I am addicted to cocaine, it's an illicit substance, and not fear that they be sent to jail. What else can happen? How else can we help, you know. So can't we divert them to community service, the rehabilitation centres, and then from there, we prepare them for living without the substance. I think that is the issue. You know, it's not so much as victimisation, no, but I think let's not throw any and every heroin addict into jail - because that's really filling up jail with people who should not be in jail. That's why rehab centres should be there, and that means we should try and lobby government to support the establishment of rehab centres, either as a part of public service structures that exist now, or separate state funded, so that the costs are not too high.'

'I'm saying we should lobby government to provide detoxification centres and rehab centres within public service structures so that we can have more people reaching out to deal with addiction.'

Diversion programmes were generally regarded to be the answer in terms of heroin use disorder related crimes. Diversion programmes implied the rerouting of such cases away from criminal proceedings towards rehabilitative initiatives.

'However, what I would perhaps recommend at legislation point, is that you have to look at diversion programmes.'

'I'm supporting a harder process; but that does not necessarily mean going to jail, but to diversion programmes such as community service and also including spending time at the rehab centres for withdrawal and for detoxification.'

5.3.6 Harm reduction intervention

Heroin has been slower to catch on than crack cocaine in South Africa. This may be partly owing to the fact that the drug was initially marketed as injectable. The only drug injected in South Africa prior to 1994 was Wellconol, known on the streets as 'pinks', which did not have a good reputation. The rush and feeling that Wellconol produced made many experienced users prefer it to injected heroin. Despite the pharmacological measured dose, septicaemia and emboli tended to kill Wellconol users without warning; therefore not many of these users are left. As a result of this history, 'spiking' initially attracted a bad name in South Africa, and the culture of intravenous injection was minimal. Most of the heroin use in South Africa was initially smoked, a tendency that has been changing during recent years, with evidence indicating that more heroin users are using or experimenting with intravenous use. Once the transition is made to intravenous use, it is unlikely that people will switch back. Injecting heroin is the most direct method of ingestion and usually gives a 'rush' not associated with more oblique methods. In a country with HIV levels as high as our own, this represents a serious health concern, especially when sex workers form a significant part of the user base (Leggett, 2001). Contentious and debatable aspects, such as harm reduction interventions like needle exchange programmes, were discussed at length by all the specialist participants. The sharing of injecting equipment can be powerfully influenced by the implicit or symbolic meaning of the act. There are groups of heroin injectors for whom sharing injecting equipment is not merely something forced upon them by the absence of clean equipment, but rather a shared act of defiance and belonging. It is hoped that today's injectors can be helped to be better informed about infection risks and that they possess sufficient judgement to avoid sharing needles and syringes. However, it is unlikely that the use of heroin will always be guided primarily by health considerations, as illustrated in the quotes below (Gossop, 2000).

'It is a chronic situation, it's like suffering from PTSD, you cannot tell a guy to stop having nightmares, you've got no control over it - in his subconscious mind it's there, and drug abuse as well, I think it changes your way of thinking, because the first thing is if you're addicted to anything, you only mix with a very small minute group of people, and all those people are so far away and into the drugs, they don't care about you, they don't care because they don't know. I don't think their minds is functioning such that they would be concerned, and if people who addicted would go so far as to sell their bodies, and they have unprotected sex, I mean, then why would they bother about needles? And most, now I know that you specialise in heroin, but most of the people I come across or met or treated or tried to treat as patients, or helped to treat them as patients, they didn't care - there's no value system, everything is collapsed. I'm talking about in Pretoria... who would go to Sunnyside, and they have sex with whatever nationality, whether it's black or white or Chinese, they didn't bother, and they were willing to be... live with Zimbabweans, they were willing to sell themselves to get money and a drug for a fix. So if a person's gone so far down that road... I mean, what does a needle mean? They don't care.'

'I think programmes of needle exchange is very important. People become aware as most people don't know, most of the girls and the people I see, they don't actually know what the dangers are.'

'No, it's implemented in places like Holland, where you can go to a clinic and get free needles. It's very important I think because if you're addicted you're addicted.'

'AIDS... well it's like a guy who stutters, you cannot tell him stop stuttering, he must go to the speech therapist; he must go see a physician, so they tell him what is wrong, with his voice or whatever, is it a mental problem or a physiological problem. Now the same for people who are addicted, I mean, addiction is like something you cannot stop voluntarily.'

*'Boy that's a kind of very emotive, you know, discussion because there are obviously advantages because you're getting clean needles, and they've been given a fix and you're not going to break into people's houses, I mean, ***** who we were discussing before, had he perhaps been - had a programme like that, and had he been on that, you could say maybe he wouldn't be in jail today, because we would have been treating his habit.'*

'I lived in London also for awhile, as you know, you can go and exchange needles, I think that's very very important.'

However, two medical specialist participants who are internationally renowned drug intervention experts, noted that since the implementation of needle exchange programmes overseas (such as in Holland), a decrease in the health-related consequences has failed to actualise.

'In Holland... but it wasn't very successful...'

'At this stage it is problematic, but the second part to it is that countries where harm reduction is used in terms of providing clean needles/syringes and so on, you're not getting a substantial cut-down in the speed of anything that can be spread in that way.'

'I don't think so. It's definitely not going to curb the AIDS epidemic... it's going to stay in the drug using community.'

The fact that under international law (regulated by the *International Narcotics Control Board*) heroin remains an illicit substance, influences the implementation of needle exchange programmes internationally and in South Africa.

'Harm reduction is a debatable issue. Unfortunately I have to quote the existing international law within the legislation, which is clearly regulated by the International Narcotics Control Board, and implemented by the UNODC - United Nations Office for Drugs and Crime. Heroin is an illicit substance, and it is listed as such. So by virtue of making the needles available at centres where people can come and inject themselves, and control the amount that they inject - you are also saying let's break the law, let's use this illicit substance.'

Internationally, needle exchange programmes are generally implemented with the intention of reducing harm associated with intravenous heroin use, such as the contraction of AIDS and hepatitis B, C and G, although such programmes at present still contravene the United Nations Convention.

'The aim behind this was to reduce the spread of HIV/AIDS from sharing needles and so on. This is a thing that is going to be debated again at the Commission of Narcotic Drugs (United Nations Convention Against Illicit Traffic in Narcotic Drugs & Psychotropic Substances) in March next year (2005) in Vienna. The Commission of Narcotic Drugs meet annually to look at these procedures and harm reduction is going to be one of the dramatic debates, which means a major debate with inputs from different experts and countries - to come to a conclusion as to whether we can recommend it, because if we recommend harm reduction strategies for illicit substances, then the United Nations Convention that deals with this aspect must be changed.'

'It must allow use in the context of control harm reduction settings, specifically for Hepatitis, for HIV control and other infections.'

'I think the more clean needles available the less likely they are to contract HIV through intravenous sharing.'

'We see a lot of patients who are coming in now being HIV positive, so if they start that at least, your other risks from STD's and stuff would be less.'

'If they don't come, you don't give them the needles. So that's something you can do just to improve their health, for what it's worth.'

A concern verbalised by some specialist participants was that needle exchange programmes may also maintain heroin dependents at a user level, extenuating their syndrome. A further concern voiced by some of the specialist participants was that needle exchange programmes may further discourage heroin dependents from seeking rehabilitation intervention.

'It's not stopping people to stop using the stuff, so it's keeping people at the user level, with broken lives and so on.'

'You're saying you're now doing it hygienically, but doing it hygienically means you are extenuating them as addicts and that is what the problem is.'

'Then do they go to rehab? Why would they go into a rehab and actually kick the habit if it's being supported? That's the other thing, what motivation is there for you to actually kick the habit?'

Needle exchange programmes may also be promoting the use of heroin, sending mixed messages to impressionable individuals. The dual message may also be sent by government that it's fine to supply and use it if you're a heroin dependent, but if you're not a heroin dependent you may not use it.

'The government is saying you can supply it, but if you're not an addict you must not use it. Those kinds of arguments don't hold.'

'Now, needle exchange programmes though they are aimed at reducing harm associated with abuse of heroin for intravenous drug administration, they are actually encouraging use of an illicit substance.'

'Okay, so do you supply drugs and say we're doing a good thing because we're not spreading AIDS, or do you say, we're really doing a bad thing because we're actually saying to kids it's okay to drug? So it's a very emotive thing.'

'I don't think it's right, and naturally heroin as well... if he's going to get heroin as well... so that he doesn't get arsenic in the heroin that he buys on the street, or whatever.'

Some specialist participants also held the view that programmes such as that of needle exchange are too extremist, while others were of the opinion that it is amoral to condone and implement such programmes.

'I don't think it's a good thing. Ja (yes), I think it's pushing the limits, to give it to a guy.'

'I don't think that you should give him a needle, no definitely not.'

'But, at the same time, is it moral to actually do that? Is it moral to say to kids "okay, well then you know it's really okay, it's quite fine for you to come and have a fix..."', so no, essentially I would say it's not a good idea.'

'On the spiritual side it is really decadent and it will not solve the problem. You know I don't actually agree with it because it's decadent.'

'Morally it is not right to me. You're encouraging it on. It's just decadent.'

The comment was made that as mental health and health professionals, the goal should be to heal - not to maintain the dependence.

'Our plight is to help these people, to get them off.'

'I don't think that you're doing it in the best interest of the addicts' health.'

Another problematic aspect with regard to a needle exchange programme, and so-called 'careful' or 'responsible use', arises with regard to progressively increasing tolerance levels and the inability to maintain dosages of methadone / heroin use. The opinion of some specialist participants was that abstinence is not encouraged in such programmes, and that the heroin dependence syndrome is perpetuated.

'I think it's wrong. Are you saying then that if he cannot quit, then in other words we give him the stuff but that he must use it carefully?'

'You're actually encouraging the addiction and you're not going to stop it like that because I don't think that one guy who's really severely addicted... you will not be able to maintain a dosage of that, that's my experience with addiction. I mean he will always want more.'

'You are not bringing him to a point of stopping. At some or other point he will continue using. He will not maintain his dosage, he will some or other time overdose. I mean, he won't come right.'

Another problematic issue with needle exchange programmes arose with regard to the possibility that individuals, who might never have used heroin otherwise, could be drawn into using substances such as heroin. An intravenous user's family, and in particular children, might also be drawn into the subculture from exposure and by experiencing mixed messages from their parents / family / society.

'How do you identify who are drug addicts? How do you identify somebody who might say, "oh well, seeming that they're supplying it, and seeming that they get clean needles, I might as well go and try it".'

'So you draw somebody into it who might have never have been drawn into it before, and I don't care what the fear is behind it, as long as they don't try it. You know, if the fear is, "I might get AIDS", and not "I don't want to use heroin".'

'People who weren't interested in drugs, did they go try because it's freely available? Those kind of scenarios - how do you persuade young people today not to come in and try it? You know, I mean, how do you actually say to them "this little thing, to actually go and try it, and just because it's being supplied, doesn't mean you must actually go and try it or use it", because you're giving them a mixed message.'

'It would be very interesting to see statistics in the Netherlands of how it worked. Has people, children, if they were addicts before, did they become addicts?'

'I feel such about it, you're encouraging it on. I mean these people who are addicted also have children, they see this thing.'

Comparisons were made between that of intravenous heroin use and STDs in terms of advocating abstinence and / or implementing 'harm reduction' approaches such as condom use. The comment was made by one specialist participant that once an individual is sexually active (or dependent on heroin); the likelihood of abstinence and behaviour change is not prevalent or always realistic. In such instances, harm reduction approaches may be the only way to reduce risk, be it through needle exchange programmes (regarding intravenous drug use) or condom use (regarding risky sexual behaviour).

'It's the same with STD's - sexually transmitted diseases, do you say to kids "you know what, if you're having oral sex you can still get sexually transmitted diseases plus AIDS, so what we're saying is abstain all together, you know, get yourself pure, if you want the old fashioned word, until after you're married".'

'I think that to take such a stance is the same as the concept of condoms and AIDS.'

'Then on the other hand it's like... the church is telling young people to abstain. If they're already into sex, are they going to abstain? My opinion is no, they're not. Because once you've experienced it, you want it, unless you have a radical change where you say the second virginity thing that a lot of youngsters are doing, but whether you stick to it or not is another thing.'

'So for whatever reason, it really doesn't matter as long as they abstain, either from sex or the drugs. But if you're into that behaviour, you're not going to change that behaviour, you're not, unfortunately.'

The specialist participants generally felt that South Africa (as well as SADC and the African Union) is not at present in a position to support needle exchange programmes owing to a lack of a monitoring infrastructure and resources. The specialist participants were of the opinion that the stipulations of the United Narcotics Convention should still be adhered to within the South African context. Another factor that was taken into consideration is that at present intravenous use is still fairly low compared to that of other countries where needle exchange programmes have been implemented.

'I am not at this stage for our country, and the SADC states and African continent supporting needle exchange.'

'For substances that are as destructive as what heroin is, I think needle exchange provision of clean syringes and so on, is not something you can recommend in a country such as South Africa, in the SADC region, in the African Union countries, because we don't have the infrastructure to monitor, and we don't have the resources to provide these things.'

'So you should still adopt a kind of a leader route based on the United Narcotics Convention.'

'I think in a country like ... anywhere in Southern Africa where people are intravenously using they're in a incredibly high risk of contracting HIV and I think that ... one of the things that throws me for it is that at the moment intravenous use is fairly low compared to other countries.'

A number of specialist participants commented that should the intravenous drug use level rise (which is likely), then needle exchange programmes in South Africa will become crucial in terms of harm reduction, and that the government should consider specific zones where needles (and even potentially heroin) can be used under supervision.

'I think when that changes, and I think it will change, because heroin is fairly new drug here, then in terms of harm reduction, needle exchange will be crucial. I think it's a given that people will not not share needles if they have to use. If your going to use, and it tells you to not use or to share a needle, they'll share a needle.'

'So I think perhaps timing needs to be thought about and perhaps availability, but in the end if there's a high incidence of intravenous heroin use, more of needle exchange programmes and methadone maintenance programmes.'

'I do think, and it's only my opinion, I do think that government should have fixed places where the people go and feel free to get a needle from a chemist that is sponsored by government for free. I think it helps with the spreading of AIDS, to a great extent. In Europe you find a special... almost like safe place you can go to, it's for free, and it's like a safety house that you go to and you, it's actually an escape from your fellow addicts, and you can stay there and eat there, and you can becomes clean, but you can also further on do drug abuse there, still go on using drugs, it's a very controversial thing, I know.'

5.3.7 Maturing out hypothesis

A change in life circumstances, such as getting married and having children, was believed to contribute to recovery. Most specialist participants were familiar with the maturing out hypothesis of heroin dependence, and generally felt that interventions could help facilitate such change.

'I think a very small percentage, that either they turn to religion, or they get married and have children and change their whole way of existence, I mean they do radical changes.'

'I think... everyone stops eventually. Yes, if they don't die.'

One specialist participant discussed the similarities between alcohol and heroin dependence, stating that even if you mature out of the active use of alcohol (which can be equally applied to heroin or any other psychoactive substance), the thought of use will always be present since the behaviour that the individuals have taught themselves over the years lies deeply embedded within the subconscious mind. Thus, according to the specialist participant, an individual will become a rehabilitated alcoholic (or equally a rehabilitated heroin dependent) - but the status of dependence will always remain.

'Yes, I think it's the same with alcohol, you will, I think with alcohol and heroin there are a lot of similarities... you can mature out of it, but, you will always, once you an alcoholic, you will remain an alcoholic for the rest of your life, the only thing that is going to change is that you'll be able to say that I'm a rehabilitated alcoholic, but the alcoholic will stay, you cannot change your status because it's there in your mind, it's in you way of perceiving the world, and that is the way of coping in alcoholics. It's the same story, it's a way of coping for certain people, and that coping mechanism is stored in your memory, stored in your brain, and if the stressors get high, you will maybe not resort to abusing alcohol again, but you will think about it, he will think about it for sure. A guy can be dry for ten years, and he'll get flashbacks although he's been dry for ten years, relapse even after ten years, because that is your way of coping. It's something you have taught yourself, or you have taught yourself, or you've been taught by your friends or peer group or whatever. But it's in your mind; it's in your memory, in your subconscious mind you will always think about it, as a way of resolving problems, because if you abuse alcohol you feel far away from things, you're not so closely connected with yourself and/or other people and or with your problems. So it's one way of coping, some guys drive fast with their cars, some guys hit their wives, some turn to religion. There are so many ways of coping with life, but once you've gone down that road of abusing alcohol as a way of escaping or resolving your problems, it's in your way of perceiving the world and life, so you'll never be able to say I'm not an alcoholic, you'll say I'm a rehabilitated alcoholic, or a recovered alcohol.'

5.4 SUMMARY

Although researchers have reported that an equal or greater proportion of heroin users overcome heroin dependence without formal intervention, than those who do recover following intervention (Waldorf, 1983; Biernacki, 1986), the importance of intervention has been emphasised in the present study and in the previous studies of Dos Santos and Van Staden (2008), Dos Santos (2006), McIntosh and McKeganey (2002) and Edwards (2000). These studies suggest that intervention may catalyse and support the natural processes of recovery.

CHAPTER SIX

DISCUSSION AND CONCLUSION

6.1 PROHIBITION VERSUS DECRIMINALISATION / LEGALISATION

Efforts at social control do not always lead to predictable consequences. If architects so often fail to design successful urban living spaces, those who aspire to regulate and control our psychological and social behaviours would be advised to display a little more humility. The efforts of police, doctors, pharmaceutical association and others to restrict access to needles and syringes in Edinburgh during the early 1980s, led to addicts stealing from hospital dustbins and buying injecting equipment from other users. The last retail supplier who was willing to sell injecting equipment was forced out of business in 1982, when local doctors withdrew their trade and police put pressure on him to change his practice. This restricted access was one of the reasons for needle sharing that led to such explosive growth in HIV infection and hepatitis among Scottish injectors. Surveys in some areas of Scotland (notably Edinburgh and Dundee) found that up to 65% of some samples of drug injectors were HIV positive. These HIV rates were as high as anywhere else in the world and Edinburgh became known as the AIDS capital of Europe (Gossop, 2000; Robertson, 1987).

The frightening complexity of these issues has led many to seek a solution to the problem, either by increasing aggressive enforcement and punishment or by simply legalising the whole affair. Opposing camps form around these two extremes and debate is reduced to polemics, with each side talking past the other. This sort of reductionism fails to recognise that one size does not fit all. The appropriate strategy depends on current local circumstances. It may be that a ruthless dependency producing drug such as heroin is simply too readily available and too greatly in demand for prohibition strategies to have any positive impact at all. Even if a substance is free of bad side-effects, it may, in some depressed societies, serve only to cause deeper problems and injustices, like the 'soma' in Huxley's (1932) *Brave New World*. If solutions are forthcoming they will probably be as complicated as the problems themselves (Leggett, 2001). It is this complexity that is the subject of this thesis.

The pragmatic 'harm-reduction' approach to heroin use disorders does not necessarily involve a comprehensive approach. When heroin use can be prevented, every effort should be made to stop the problem before it starts. Where it cannot, creative means of dealing with the risks should be sought. The paradigm case of failed prohibition is 'Prohibition' itself - the banning of alcohol in the United States during the early years of the last century. It is clear that this experiment in social engineering did nothing to limit the use of the drug and may have, in fact, heightened its popularity. It also formed the basis on which many organised crime syndicates, such as the American Mafia, built their early fortunes. Early prohibition is arguably the source of America's current drug problems, because it provided finance and experience to the same networks that are pushing heroin today. If nothing else, it offered glamorous role models for the current crop of aspiring gangsters and smugglers (Lee & Humphreys, 2006; Leggett, 2001; Plant, 1999).

Some libertarian thinkers would argue that tampering with the market for any reason is a mistake, because the market represents the actual desires of the people in a far more direct manner than representative government. For hard-line libertarians, tampering with the markets is counterproductive,

anti-democratic and practically immoral. Democracy is all about choice, they point out, and the state has no business second-guessing the purchasing decisions of the public. Most of these people would recognise, however, that those who are not responsible enough to make rational choices - such as children and the mentally ill - can be morally constrained in terms of the kinds of opinions that society allows them. The problem is that heroin dependence is a kind of mental illness that does not manifest itself until it is too late. Markets are often too slow to react before substantial damage is done, particularly when the target buyers are young and inexperienced. Just as one would want to stop the sale of toxic bubblegum or other defective and dangerous products aimed at youth, it sometimes makes sense to intervene at a political level. This is particularly true in cases where demand is not yet widespread - it may be in the best interest of society to make a collective decision not to allow certain substances to become popularised (Leggett, 2001).

Even once great demand exists it is still possible to ban substances effectively in certain societies. When social coherence is high, a large percentage of the population agrees with the ban and the state is powerful enough to enact effective enforcement, even highly addictive drugs can be stamped out; for example, China was able to eliminate opium and heroin use under communist rule, after hundreds of years of widespread misuse. In more diverse and conflictual societies, however, prohibition tends to be a big joke. Despite spending \$30 billion a year on fighting drugs, every major drug of abuse is readily available in most major cities in the United States. South Africa is clearly closer to the United States situation than the Chinese (Leggett, 2001; Plant, 1999).

Prohibition and reduction of supply go hand in hand. In countries where controlling the supply of substances is impossible, prohibition does not make much sense. While most will concede that, unless one is speaking of Singapore, completely eliminating illicit drugs is impossible, prohibitionists hope that limiting the supply will slow the spread of the drug, prevent the growth of demand, and eventually push the price up to the point at which only the most dedicated dependents can afford to get high. The question of any given society must be: is this strategy workable in the present circumstances (Leggett, 2001)?

People in favour of more 'regulated' drug markets advocate a variety of harm-reduction techniques, such as allowing dependents to obtain their heroin or methadone from a government clinic or sponsoring needle-exchange programmes (Alavi *et al.*, 2003; Gossop, 2003). The state participates in the market by providing the drug or the equipment under controlled conditions, thereby undercutting the illicit market. Programmes have been piloted in Europe and have led to mixed results even there (Laurence, 2007). While it is unlikely that the South African government will be offering any free drugs in the near future, as the specialist participants suggested, condom distribution represents a very real concession to the view that endorsing 'abstinence' is not always enough.

6.2 HEROIN USE DISORDER INTERVENTION WITHIN THE SOUTH AFRICAN CONTEXT

Of all the vice problems confronting South Africa, the heroin dependence syndrome and its spin-offs pose the most serious challenge. If the state had acted in the early 1990s at the first sign of trouble, untold human misery might have been avoided. A study conducted by Plüddemann and Parry (2004) regarding heroin abuse epidemiology in Cape Town indicates a lack of affordable intervention, a lack of available detoxification services, particularly in state hospitals, and mixed reactions with regard to the

possible efficacy of harm reduction strategies. Parry *et al.* (2005) support the above mentioned findings, and also highlight the need to develop a strategic plan for intervention in South Africa before the heroin epidemiological situation deteriorates further. But it is still not too late to implement a combination of social and law-enforcement solutions to vice problems, with law enforcement perhaps coming first.

The only reason that arresting the dealers has a chance of succeeding at this stage is that it is still early in the epidemic. The primary players are an identifiable group - the Nigerians. In areas of high concentrations of inhabitants, Nigerians are even making street-corner sales. Profiling of drug offenders is a controversial topic, but in the South African context the profile is too obvious to ignore (Leggett, 2001; Smille, 2000; Baynham, 1998; Kruger, 1996). This is an opportunity that should not be missed. It will not solve the country's heroin problem, but it may set it back a few years. The root of the dealers' arrogance is police corruption (Leggett, 2001; Baynham, 1998; Ryan, 1997). Leggett (2001) proposes that any action should stem from outside the specialised branches of the police, and indeed, outside the SAPS. The Scorpions would have been the obvious choice, with only the most trustworthy agents being involved; however, the South African government has recently approved the disbanding of this elite crime-fighting unit. Police or the military could be used for back-up and processing but they must not be forewarned on any swoop. In a single night, a series of buy and bust operations could literally rip the heart out of the heroin market in a city like Johannesburg. Even if the Nigerians prove too clever to be caught with the goods on them, most of these dealers are not here legally, and any credentials they might produce will not stand up to careful scrutiny. Whatever passport they wave, the arrestees should be examined by Nigerian law enforcement personnel and their national identity ascertained. Nigerian drug law stipulates that any Nigerian national convicted of a drug offence in another country will, upon being repatriated, serve another sentence in Nigeria. Rather than being a long-term burden on the South African public, these foreign criminals can be exported to the land of their birth. If this approach appears a bit too aggressive or xenophobic, it is possible that the dealers could be called into negotiation. If offered permanent residency and a right to retain their present assets, some might feel inclined to cooperate (Leggett, 2001).

The second line of assault should utilise the asset forfeiture provisions of the *Prevention of Organised Crime Act* (Act 12 of 1998). Every sleazy hotel fostering drug dealing and sex work is potentially forfeit to the state. The Nigerians, familiar with asset forfeiture from their own country, do not register property in their own names; nevertheless, the hotel owners can be identified. Public seizures may make property owners more reluctant to rent premises to criminal groups, and if the Nigerians are forced to purchase property, their assets will also become vulnerable. Seizing the residential hotels will not completely discontinue the availability of heroin, but it will throw a major spanner into the distribution process. The residential hotels play a vital part in the heroin and other drug enterprises. They represent more than merely the place where the whole problem started; they represent an atmosphere of non-accountability that is an incubator for crime. Their spatial arrangement makes them difficult and dangerous to raid, and there is a whole culture that has grown up around them and would be difficult to replicate elsewhere (Leggett, 2001; Baynham, 1998). Without them, crack cocaine and heroin dealing will take a giant step backwards in this country; shutting down the hotels may well simply displace the problem, but this period of displacement represents a window of opportunity for enforcement and harm reduction. But the victory will be short-lived without immediate follow-up. So long as there is demand, there will be a supplier. Coloured, white and black dealers who have obtained their supply from the Nigerians could easily call upon their contacts for stock and move into the vacuum left in the Nigerians'

wake (Leggett, 2001; Ryan, 1997). It is therefore imperative that this law-enforcement action be followed by an integrated programme of social and psychological outreach. These programmes must be expanded to address new demands. They will need to include specialised skills training and career counselling for those who wish to recover from heroin dependence. Housing, for example, could be arranged in the newly seized buildings.

6.3 HEROIN USE DISORDER ASSESSMENT AND INTERVENTION

Heroin use disorder interventions should be appropriately responsive to the needs of individual heroin misusers. The term 'dependence' may mislead if it is not taken to imply that the wide range of different presenting problems can be subsumed within some relatively fixed and unitary construct. In this respect, the term obscures more than it reveals. The need for responsiveness to individual differences requires attention to specifics. These include issues such as whether the substance is taken orally, by smoking, or intravenously, whether discontinuation will lead to a clinical withdrawal syndrome requiring medical treatment in its own right, and whether the dependence is integrated within the user's personality and social lifestyle, or whether it is seen as an isolated item of problem behaviour. The problems associated with heroin use disorders generally extend beyond the dependence syndrome, and include other behaviours and disorders. Also, each heroin user may experience different problems, which may range from the acute to the chronic, and from the mild to the extremely severe. Heroin use disorder problems are diverse and are manifested by people with different backgrounds and characteristics. There are also many different types of treatment approaches and interventions (Gossop, 2003).

Many heroin dependents suffer from social and / or psychological problems that precede their dependence (Rodrigues-Llera *et al.*, 2006; Vasile *et al.*, 2002; Karam *et al.*, 2002; *American Psychiatric Association*, 2000; Leshner, 1999). These may include social behavioural problems from an early age, educational failure, literacy problems, family disintegration, lack of legitimate job skills, or psychiatric disorders. Such problems tend not to resolve themselves simply because the individual gives up heroin and, unless specific services are made available to deal with them, these problems may continue to cause difficulties for the individual and for their chances of recovery. For many heroin dependents, recovery is not only a matter of giving up heroin-seeking behaviour, but also involves tackling the social and behavioural problems that may have preceded the dependence and that have often deteriorated as a result (Dos Santos, 2006). The treatment of heroin use disorders, therefore, may include interventions that extend beyond the focal point of heroin consumption, and that tackle the personal / psychological, cultural and social impairments which may affect those who enter treatment.

6.4 HEROIN USE DISORDER INTERVENTION

The therapeutic landscape of substance use disorder treatment has changed dramatically since the 1960s, and especially during the past two decades. Many promising interventions, procedures and therapeutic agents have been developed. Different forms of psychological treatments have been devised and have been provided in a systematic manner. There are a range of pharmacological options, where once there were very few. There is increasing evidence concerning the effectiveness of many of these intervention options. Withdrawal / detoxification services utilise a considerable proportion of resources allocated to the treatment of heroin use disorders, but record limited success. Most heroin

dependent users attempting ambulatory detoxification do not complete it; residential detoxification exhibits better completion rates but is expensive and less accessible; and in both cases most people who successfully detoxify quickly relapse to heroin. New approaches to withdrawal management are required that will enhance completion rates and reduce symptoms, heroin use and complications during withdrawal. However, these outcomes alone may be insufficient to improve longer-term outcomes greatly, and increased participation in ongoing intervention may be required to achieve this goal. According to Kakko *et al.* (2003), who aimed to assess the 1-year efficacy of buprenorphine in combination with intensive psychosocial therapy for treatment of heroin dependence without parallel agonist treatment, psychosocial interventions have consistently failed to demonstrate effectiveness, mainly because of low retention in treatment programmes despite long detoxification periods and intensive interventions. According to these researchers, the 40 recruited individuals meeting the DSM-IV criteria for opiate dependence for at least a year, but who did not meet Swedish legal criteria for methadone treatment, were randomly allocated either to daily buprenorphine (fixed dose 16mg sublingually for 12 months; supervised daily administration for at least 6 months, possible take-home doses thereafter) or a tapered 6 day regimen of buprenorphine, thereafter followed by a placebo. All the patients participated in cognitive-behavioural group therapy to prevent relapse. Findings of the study indicated that the 1-year retention in treatment was 75% and 0% in the buprenorphine and placebo groups, respectively ($p = 0.0001$; risk ratio 58.7 (95% CI 7.4-467.4)). Urine screens were about 75% negative for illicit opiates, central nervous stimulants, cannabinoids, and benzodiazepines in the patients remaining in treatment.

There is also an understanding of the importance of the social environment, diversion programmes for criminal offenders, educational development, behavioural functioning, cognitive processes, after-care programmes, alternative therapies such as relaxation and the use of active coping strategies during recovery. Nonetheless, the treatment and management of heroin use disorders continues to be characterised by new developments, altering perspectives, and by controversies of one kind or another. The need to develop and strengthen interventions that are effective and holistic in reducing the extent of heroin problems and in helping users to give up heroin taking, within prisons and low-income groups as well, remains a matter of importance that was emphasised by the specialist participants.

6.5 INTERVENTION SERVICE PERSONNEL

Intervention treatments are also currently provided by a wider range of personnel with differing backgrounds, and in a wider range of settings. The processes or recovery are not always gradual and incremental but often reflect sudden changes in beliefs and behaviours. Recovery may also be highly idiosyncratic. Treatment intervention is not an impersonal process offered by neutral agents. For the patient it can be an important life event, and the relationship between patient and therapist can be one of great emotional and psychological significance. It is a surprising finding that substance use disorder research has paid so little attention to the role of therapists' characteristics and skills, and their influence upon outcome (Dos Santos & Van Staden, 2008; Gossop, 2003).

At present, there are techniques and tools that provide individuals with useful assistance and knowledge on how to stop using and refrain from returning to heroin use. It is no longer acceptable to simply do what feels right. Organisations and professionals who specialise in treating heroin use disorders are an accepted part of the health care delivery system. As in all other areas of health care, there is a rapidly

increasing dependence on the development of scientific information to shape and improve the future of the field. Within the past decade, psychiatrists, medical doctors, psychologists, social workers, family therapists, nurses and allied health professionals have all incorporated knowledge regarding the identification and treatment of heroin use disorders into categories of licensure and certification requirements. It is the ethical responsibility of the clinical practitioner in the heroin use disorder intervention field, as in other fields (such as cancer and heart disease), to stay informed with regards to new and more effective clinical procedures. The field of heroin and substance use disorder treatment is becoming increasingly professional and those who form part of the system need to continue to stay abreast of new developments so that techniques and tools can be used to make the difference in promoting a successful recovery experience for the individuals for whom existing treatments are currently unsuccessful (Coombs, 2004). As new approaches with sound scientific support emerge, methods may be revised and new treatment options added. Although some of the elements of effective treatment intervention have been defined in this study, there is much to learn and much room for improvement.

Furthermore, many different parties are involved with or display a strong interest in heroin intervention services. These include: the *individual patients* entering treatment; the *clinical programmes* that offer different types of services; *family members* or others who are personally involved with those receiving treatment; third-party *treatment purchasers and funders* (national, regional, and local); and various types of *regulatory agencies* who oversee, evaluate, or enforce legal or clinical standards. There are also other concerned individuals and agencies which maintain personal or professional relationships with heroin dependents in treatment. All of these groups tend to exhibit different expectations of intervention and about what should count as successful intervention outcomes. As the specialist participants emphasised, an effective response to heroin use disorder cannot be regarded as the sole responsibility of treatment services. Other services will necessarily come into contact with people with heroin problems, and the responsibility for tackling these problems should be spread more widely.

6.6 HEROIN USE DISORDER INTERVENTION EFFICACY

The assessment of intervention need has been defined in terms of the ability to benefit from health care (Stevens & Rafferty, 1994). The need for intervention is specifically relevant to the provision of health care, in this context, and should be interpreted with regard to the potential of specific types of interventions to remedy heroin use-related problems. In the evaluation of the effectiveness of treatment interventions for heroin use disorders, the elimination or reduction of heroin / drug use usually serves as a primary outcome measure. A more comprehensive assessment of the impact of treatment may also employ secondary outcome measures to measure changes in health and social functioning (Gossop, 2003).

An important conclusion to be reached from the present study and the findings of Dos Santos and Van Staden (2008) and Dos Santos (2006), as well as from treatment intervention research / literature, is that no single type of treatment intervention can be expected to be effective for everyone who has a heroin use disorder. Heroin users are a diverse and heterogeneous group, and these individual differences may be relevant to the selection of appropriate, holistic and effective treatment interventions. Different individuals prefer and may benefit from the different kinds of interventions. A range of promising alternative therapies are also available, each of which may be optimal for different types of

individuals, and which may be beneficial in increasing self-awareness and preventing therapeutic overload. The following intervention principles emerged from the study:

* *Clarity of purpose* - Are the goals of the treatment clear and are both provider and recipient in tune regarding these goals? Are there specific outcomes (whether proximal or ultimate) being sought?

* *Appropriateness to the presenting condition* - Is there a fit between the person's current condition and what is proposed by them?

* *Assessment and care planning* - Has there been a thorough assessment to inform the care plan? Is this assessment based upon sound practice and knowledge and conducted skilfully? Is the care plan clear and well thought out?

* *Motivation for change* - Can the intervention cope with and respond intelligently to ambivalence, fluctuating motivation and varying degrees of realism? Does it meet the client where he/she is? Is the client's choice understood and taken into account?

* *Preparation* - Is the client thoroughly prepared for the intervention to which he/she is referred? This applies to initial treatment or aftercare.

* *Supportive evidence and best practice* - Is evidence available to justify using the intervention and to indicate that it offers a better chance of success for the presenting condition than others? Has it been properly applied in practice? If there is a shortage of evidence, what is the rationale for employing the intervention? Does this make sense and is it testable? Qualitative and quantitative research may be able to make an important contribution here.

* *The whole person* - Are physical, psychological, social, cultural and spiritual factors taken fully into account?

* *Families* - Where appropriate and depending on circumstances, engaging with families and significant others at the earliest opportunity.

* *Responsiveness* - Is there an ability to adapt to changing circumstances?

* *Workforce* - Do its members possess the right knowledge and skill to be of real help and can they apply them effectively? Do they have adequate self-knowledge? Can they combine professionalism and vocationalism? Are they expertly led, supervised and managed? Is there a commitment to continuing professional development by both the employee and employer?

* *Environment and culture* - Is it conducive to helping people to effect change? Is it attractive and does it encourage engagement? Does it signal care and invite confidence and trust? Is it structured, containing and safe? Is it positive and optimistic? Does it situate the client's welfare at the centre of its business? Does it help promote a recovery culture as opposed to a using one?

* *Scaffolding and recovery resources* - Individual interventions function better and last longer if the client is 'scaffolded' by a support system to sustain motivation and is helped to develop personal resources so as to sustain treatment gains.

* *Organisation* - Is the organisation / service well run? Is it able to cope with the powerful projections associated with a distressed client group and avoid the associated pitfalls? Does it state a very clear ethical code which ensures that professional boundaries are maintained?

* *Quality control* - Are there active systems for auditing and monitoring processes and gaining client feedback?

* *The system* - Is the system for arranging and funding treatment, and in which treatment operates, coherent and therefore one that promotes effectiveness or undermines it? Are the pathways clearly defined and free from obstacles?

The findings of the study also suggest that different treatment settings may be appropriate for different people. Residential hospital care may be appropriate for those with coexisting acute medical or severe psychiatric problems. Long-term residential care in a non-medical setting (such as halfway houses) may be most appropriate for people who are socially unstable but who do not suffer from co-existing acute medical or severe psychiatric problems. Outpatient care, apart from its cost efficiency, may be indicated for socially stable individuals without coexisting acute medical or severe psychiatric problems; these findings are also supported in the studies by Dos Santos and Van Staden (2008) and Gruber, Chutuape and Stitzer (2000). The differences in problems and in the individuals with these problems must be taken into account before one can make an informed decision about what type of treatment intervention is likely to be most appropriate. Gossop (2003) argues that despite the widespread acceptance of these principles, current treatment provision at the programme level still tends to operate in a way that is more reflective of the view that 'one size fits all', with patients being expected to adjust to the programme being provided.

In the Australian Treatment Outcome Study (ATOS), 94.5% of a total of 615 heroin users enrolled, completed at least one follow-up interview over a 36-month follow-up. The proportion who reported using heroin in the preceding month continued to decrease significantly from baseline to 24-month follow-up (99% versus 35%), with this rate remaining stable to 36-month follow-up. The reduction in heroin use was accompanied by reductions in other drug use. There were also substantial reductions in risk-taking, crime, injection-related health problems and improvements in general physical and mental health. Positive outcomes were associated with more time in maintenance therapies and residential rehabilitation and fewer treatment episodes. Time spent in detoxification was not associated with positive outcomes; major depression was also associated consistently with poorer outcomes. At three years, there were impressive reductions in drug use, criminality, psychopathology and injection-related health problems following treatment exposure (Teeson, Mills, Ross, Darke, Williamson & Harvard, 2008). Findings of the present study and that of Dos Santos and Van Staden (2008) and Dos Santos (2006) suggest that the pathways to recovery tend to be complicated, and the variety of possible outcomes is extremely great. People who are treated for heroin use disorders achieve a continuum of outcomes with respect to their heroin-taking behaviour and their heroin-related problems. After treatment, some people may evidence initial improvement with subsequent deterioration. Others may

initially display little change but then gradually achieve a range of possibly substantial improvements. Others may oscillate between outcomes, where periods of abstinence alternate with periods of heroin / drug use. There is also no single, universally applicable measure for the assessment of outcome. Treatment response is not a simple matter of success or failure. As with many treatments, the assessment of outcome involves degrees of improvement, and these may have different meanings for different individual cases. Although there is a general acceptance of such goals as improved health, or reduction or elimination of heroin consumption, it is also necessary to be aware of the need for flexible goals that can be adapted to individual circumstances.

It is not uncommon for some heroin dependent individuals to lack the basic social behavioural skills and supports that they need to complete, and sometimes even to start, the recovery process. After many years, or even decades, of living a life that has been built upon getting high, buying, selling, talking, and thinking heroin, it is not surprising that giving up and staying off heroin should prove to be an extremely difficult task. Such individuals often require intensive and prolonged help to cope with the psychological, social, economic, and practical challenges of recovery (Dos Santos & Van Staden, 2008; Dos Santos, 2006; Gossop, 2003). Heroin use outcomes after intervention may include: abstinence from all forms of substance use maintained for a lifetime, abstinence followed by temporary lapse/s - followed by abstinence regained, reductions in (but not abstinence from) heroin use, reductions in heroin use but continued or increased use of other psychoactive substances, substitution of heavy drinking for heroin taking, no change in heroin use behaviours but reductions in heroin-related problems, and deterioration in heroin use and in heroin-related problems (Gossop, 2003).

The question 'does heroin use disorder treatment intervention work?' also places too much weight on treatment intervention. It does not situate the processes of treatment intervention in an appropriate framework. Many factors contribute to outcome, and treatment intervention is only one of these. Outcome is also influenced (often powerfully) by the psychological, social, and other characteristics of the individual, the nature and severity of the problem itself, and by a wide variety of post-treatment experiences and events. It is influenced by complex interactions between all these factors (Dos Santos & Van Staden, 2008; Dos Santos, 2006; Gossop, 2003). The probability of a positive outcome for a homeless heroin injector, for example, with a severe mental illness and HIV/AIDS is likely to be lower than that for a socially stable person with a dependence on a prescribed substance taken orally. The probable differences in outcomes would remain even if each of these individuals received an individually tailored treatment intervention (Gossop, 2003).

The effectiveness of treatment is a complicated matter to understand and assess. The question 'does heroin use disorder treatment intervention work?' is far too simple. Treatment intervention involves a variety of different practices and procedures that are used with different populations and which are designed to achieve different goals. At the simplest level, treatment intervention is required to tackle both the initiation of change and the maintenance of change. It is one thing to give up heroin. It is another to stay off it. Heroin use disorder treatments include a broad range of interventions that vary in content, duration, intensity, goal, setting, provider, and target population. Research data are increasingly becoming available regarding the effectiveness of the broad spectrum of treatments (Myers, 2005; Gossop, 2003; Myers & Parry, 2002).

6.7 PRACTICE, POLICY AND FUTURE RESEARCH IMPLICATIONS

It is easy to forget that the treatment of individuals with substance use disorders has only been rendered in an organised service delivery system for less than 50 years. The systematic application of science to the study of substance use disorders on a large scale has only occurred for just over 25 years. Outpatient treatment has only been an organised form of care for just over a decade. As progress is made in the 21st century, scientific information is now beginning to be used to guide the evolution and delivery of substance dependence care. Much of what is currently delivered as treatment intervention is based upon current best guesses of how to combine some science-based (for example, cognitive-behavioural therapy and pharmacotherapies) and some self-help (12-step programmes) approaches into optimal treatment protocols. We are only in the beginning stages of determining how this should best be done in order to produce optimal patient outcomes with an effective outlay of health care monies.

The identification of correlates of post-treatment risk for use can inform treatment and policies that seek to lower the chronicity of heroin use disorders and possibly lengthen the time between treatment admissions. The results of the study indicate that facilities may be best served by implementing feasible treatment plans which raise the likelihood of treatment completion and which retain clients for longer periods. However, efforts to lengthen the treatment episode may need to take into account the constraints on a facility's autonomy, exerted by external agencies as well as the nature of a facility's treatment technology. More is not necessarily better in the case of facilities which need to adhere to managed care and parent organizational rules for patients and those which are relatively understaffed. Decision-making processes in facilities need to factor in organizational effects on treatment outcomes. Making accreditation mandatory might also result in significant benefits for clients in treatment, especially those in residential care.

Given the significant differences between facilities highlighted by the results of this study and by that of Dos Santos (2006), future studies on treatment efficacy need to factor in the variance between interventions, even when examining individual-level correlates of outcomes of intervention, being administered across facilities. The results of this study highlight the importance of collecting data / information on the individual and programme levels, as well as of employing multilevel methods to examine the effects of heroin use disorder intervention.

I was born in the year of the dragon. You keep running; it keeps running. Dragons never tire. It has written your stories, charged your mind, shaped your cultures and economies. Still it runs, imperious and wise, refusing your judgements, blurring all the lines. It scorns and scoffs at your attempts to paper chase it down. It runs ahead; it laughs at you. You hear it all, and still you try to tell the dragon's tale.

You chased it out to the poppy fields. Brown sugar, black gold, warm white light: you watched the whole thing crystallize, running through its repertoire, its stories and songs, the art and design of its influence. You stalked it through the maze of waterways, the tram tracks and the highways, squalid hotel rooms, city squares and alleyways and off into a maze of deals, rackets and temptations, a long tale of prohibitions and desires. You witnessed the insights it had given and the lies it had told, the pain it had driven and the pleasures it had sold. It gave you its plots and its characters, the maps of its memories. It boasted of its wars and the battles it had won, the fortunes it had made, the damage it had done.



It kept running. Dragons never tire. It blazed its trails across darkness, it kept running through your mind, tempting, escaping, daring you to chase it just a little more. You kept running the story through your mind. It dances ahead. You heard it all, and almost became the dragon's tale.

Dedicated to

Russell Matthews

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APPENDIX A

HEALING THE DRAGON: HEROIN USE DISORDER INTERVENTION

INTERVIEW SCHEDULE

HEROIN USE DISORDER SPECIALIST

You are requested to participate in this study, in fulfilment of a PhD (psychology) degree, Department of Psychology, University of South Africa, which explores heroin use disorder intervention.

All interviews will be tape-recorded for analysis purposes. All information you contribute will be held in strict confidence, and will be identified by numbers only. No identifying information will be included in the thesis itself, and conclusions in the study will not be ascribed to any particular specialist. The duration of the interview should not exceed one hour.

You can receive, on request, a copy of the research proposal and/or copy of the summary of the study's results. The researcher, Monika dos Santos, can be contacted on 082 572 0249, or e-mail: monika.wilde@gmail.com

If you are dissatisfied at any time with any part of the study, you may report your concerns to the study's promoter, Professor FJ van Staden, Ethics Committee: Department of Psychology, PO Box 392, UNISA, 0003 or e-mail: VSTADFJ@unisa.ac.za

HEROIN USE DISORDER SPECIALIST

A. DEMOGRAPHIC INFORMATION

NAME _____

QUALIFICATION/S _____

RELEVANT EMPLOYMENT HISTORY _____

NATURE OF EXPERIENCE _____

YEARS OF RELEVANT EXPERIENCE _____

postal address: _____ code: _____

e-mail: _____ tel.: _____

B. INTERVIEW QUESTION

What intervention strategies, both psychosocial and pharmacological/medical, are in your opinion the most effective in treating heroin use disorders?

PROBES

Is there a difference between treating heroin use disorders and other substances use disorders?

What is your view with regards to the length of treatment?

Do you think that harm-reduction approaches, such as needle exchange programmes and pharmacotherapy maintenance programmes, are beneficial or not within the recovery process?

Are you of the opinion that any specific type of psychotherapeutic / psychosocial intervention is the most appropriate for treating heroin use disorders?

If you are of the opinion that medication should be prescribed, what medications for (a) withdrawal symptoms (b) cravings / maintenance, are most conducive towards recovery?

APPENDIX B

PARTICIPANT I

Monika: What interventions, both psychosocial and pharmacological/medical, are in your opinion the most effective in treating heroin use disorders?

Specialist: Medically, I think people need to detox reasonably comfortably. I don't disagree that the hardest detox - the lesson learnt (*inaudible*). So I think there has to be medical, safe, reasonably comfortable medical detoxification from heroin. Obviously the complications of heroin is... mmm medical, but I think it needs to be quick. I don't think it needs to be drawn out and long. We do a five day heroin detox which I think is the safest and comfortable and I think longer than that as an inpatient is inappropriate because I think it is just wasting time and resources as people are not going to start the emotional and psychological work while they're detoxing.

Monika: So you're not really pro maintenance programmes?

Specialist: I think maintenance programmes have a place, as I said before, for the long-term heroin addict with little motivation to change and few resources. Um, I think what methadone maintenance does is harm reduction, harm both to the individual and to society. I think in terms of people that can get well, should get well, and should be offered the opportunity to get well... and I think half of them fail, do you know what I mean, then methadone maintenance is an option for long-term, poor prognosis, badly damaged...

Monika: Okay, and in terms of the detoxification; also methadone? Or any other medication?

Specialist: We prefer methadone. With Subutex... what we find with Subutex is that people get, they quite like it, and they get quite attached to it. Since we've been using it, we've found that a number of our clients have gone after treatment, when they've relapsed, to various doctors and tried to mission Subutex, and then they've used and misused Subutex as a drug of choice. We find very little of that with methadone, so we've actually stopped using Subutex because of the risks. The other reason why we stopped using it is because with Subutex, people feel wrapped up for the five days, and as soon as they stop it they go through hectic withdrawal. Whereas with methadone they don't feel that comfortable the first few days. They actually suffer the first few days and by the time you stop it, they're fine. So I think methadone in low doses so that as they come in they see if they do quite well with the withdrawal and five days later the detox is over.

Monika: Could we just touch on the dosages?

Specialist: We do usually... the protocols are 15ml x 3 a day, but it's 2 and 5, so it's actually 6mg of physeptone 3 x per day, reducing over five days. We will give people who are withdrawing 45mg in stack-dose to stabilise them. But obviously it's up to our doctors to do an assessment, to determine intervention criteria for the stack-dose... the maximum milligrams that many people get to help them is 2mg of physeptone from day one, which is very low, where obviously it will take the edge off, it will help them, but it won't stop them from withdrawing.

Monika: You mentioned harm-reduction approaches, any thoughts on the needle exchange programmes?

Specialist: Yea, I think in a country like... anywhere in Southern Africa where people are intravenously using they're in a incredibly high risk of contracting HIV and I think that... one of the things that throws me for it is that at the moment intravenous use is fairly low compared to other countries, and I think when that changes, and I think it will change, because heroin is fairly new drug here, then in terms of harm reduction, needle exchange will be crucial. I think it's a given that people will not share needles if they have to use. If you going to use, and it tells you to not use or to share a needle, they'll share a needle. I think the more clean needles available the less likely they are to contract HIV through intravenous sharing. So I think perhaps timing needs to be thought about and perhaps, you know, availability, but in end if there's a high incidence of intravenous heroin use, more of needle exchange programmes and methadone maintenance programmes.

Monika: Okay. Are you of the opinion that any specific type of psychosocial intervention is more beneficial compared to others?

Specialist: I think there needs to be a comprehensive intervention, and not just to deal with the medical. I think just detoxing people without an extensive counselling intervention is a waste of time. I think that just counselling people and then afterwards medical help is probably of limited benefit, and I think somewhere in there, there needs to be a kind of family aspect to the intervention. So I think for the individual, and I have to say spiritually as well, but medically, psychologically and

spiritually they need to be supported and nurtured and I think families need to be involved and the other thing that I believe is that unless there are resources available, brief interventions are going to be of limited value. I think brief intervention where in that suggestions are made about long-term care, I don't know what long-term care is available apart from the 12-step versions or a church group or those kind of things. Only when those strategies are developed, then those kind of brief interventions might work, but unless brief interventions leading to long-term care, then I think they're going to be of limited value. And so... I do think that inpatient detox's are safer, more likely to succeed than outpatient as well, for heroin addicts. Bring people in, detox them and start a counselling process... it's just more cost effective than trying to manage their detoxing on an outpatient basis. But it also depends on the individual, it depends on how long they've been using and I think there is a big difference for me between people who've been using two/three years, at a fairly early-stage heroin addict, and those who have been using seven to ten years, the more 'chronic' heroin addict. And I think there are different intervention strategies that would be appropriate for those people.

Monika: Thank you so much. You've been part of the inspiration for the research, thank you.

Specialist: Okay!

PARTICIPANT 2

Monika: What intervention strategies, both psychosocial and pharmacological, are in your opinion the most effective in treating heroin use disorders?

Specialist: I think one of the most important things is to assess to see the seriousness of the problem. With an established addiction, it's always important to admit the patient to a treatment centre, where they can be dried out, and that centre must also have an opportunity for detoxification. Some people would have very serious withdrawal symptoms on stopping heroin, because of it being an opiate. Um, if you don't have back up in medical staff and equipment and medication for detoxification to deal with withdrawal, you run the risk of patients recompensating and getting worse and becoming very sick. But once patients have been admitted, then you have to decide what it is you want to achieve. There are two processes; one - stop them from using heroin completely without substitute medication. It would mean that you would treat the withdrawal symptoms by using any one of the standard benzodiazepines, and you also have to attend to the nutritional status. Many of them don't eat, so you need to replace... they need to give them supplementary vitamins, thiamine and B-complex vitamins, and you have to assess as to whether or not they are depressed or not anxious. Do they have any pre-existing psychological or psychiatric problem? Because if there's co-morbidity, then you don't just deal with the addiction on its own, but you attend to the underlying problems, maybe if it's depression and so on. Um, one week is not enough for dealing with withdrawal in preparation for outpatient rehabilitation. Now in terms of rehab - understand that heroin addiction is a serious form of addiction and therefore what we want to do is be prepared for relapses. The method that seems to work in many areas where stimulant and opiates have been used, is a structured approach based on cognitive behaviour therapy strategies. You've got to have a clear baseline. You've got to identify goals that have to be achieved, and you have to map out a clear contract that will help the client and you achieve those goals. You have to have structured systems of identifying triggers for the addiction, things that lead to relapses. You have to offer or to look at what support systems that the patient has, at home, in the work place and so on. You can also do that by directly looking at the cost to the patient in terms of loss of job, loss of income, illness and so on, associated with heroin addiction. Having brought that up to the surface, the patient will realise that he has a problem. So you give him this information, and you test him. He must be contracted into being tested, whether in hospital or out of hospital, so that he should be aware that there will not be follow-up on just questions, but there will be actual testing urine, to check if he is positive or not. That is important, that must be built into the contract. That changes behaviour. He will still sometimes try and bolt you on that, but this he knows, he can be tested at random. Now, this is an approach where you are not using any substitution, and it's a very difficult one to use in the sense that it is not easy to stop one from using heroin - the craving is very strong, even after the first two weeks of stopping it, and they can become aggressive, they can even go and kill, just to make sure that they get the stuff, and, hence the alternative is to use substitution medication. In this country, South Africa, methadone substitution has been the main substitution mainly in hospitals, or in treatment centres, but it's not yet recommended for outpatient use, because addicts tend to discover that methadone still gives a bit of the pleasure of heroin. You know, it doesn't give them the pleasure as such, but you know that if they have a serious relapse, and when they take it - the craving stops. But it's a kind of an all or none kind of substitution medication. So, you can either use that regularly, but if you use that you are hoping that you will slowly wean the person off, and off heroin completely. And there must be a contract that specifies that, and all those things happen if there is a contract that specifies that. All those things happen faster if there is a combination of medication and psychotherapy. So it's still continual supportive psychotherapy, particularly Cognitive Behavioural Therapy. Now, the new approach, well not new, but a third one, is giving a partial antagonist - that is buprenorphine. Now buprenorphine is a very good partial agonist in the sense that when you give buprenorphine, you don't totally block the effect of the opiate. Okay, they're not taking the opiate, but it still gives them a little bit of the pleasure of opiates. So, it's not just an all or none thing, but it reduces the craving also, so it's a slow process. Some people say, instead of moving from opiate addiction to methadone substitution, perhaps the intermediary phase could be a partial agonist such as buprenorphine, and then when you wean them off buprenorphine, you introduce them to methadone programmes again - in lower dosages - with the aim of weaning them off completely. Because now you have also reduced the craving. When you use methadone, you don't feel the strong craving because you've blocked the effect of opiates completely. That's why buprenorphine is recommended as a partial agonist, and that still has to go with some form of psychotherapy. Brief psychotherapeutic interventions, cognitive behavioural therapy. Some strong analysis of triggers. Being prepared for relapse. Making sure that the person is tested and that you're not going into the risk of any severe problems. This seems to be the approach that should be encouraged for opiate addiction. There are other methods, which work at the higher brain level, surgical in nature, but I don't think I'd recommend these at this stage.

Monika: So you are focusing on long-term care, and not necessarily long-term treatment.

Specialist: Inpatient treatment is expensive, and doesn't test if the person can be out in the community without suddenly using the stuff; that is, can you control the craving within a community where there are a lot of triggers, knowing that there is support available - so the best test, the best therapeutic test, is actually to give them exposure so they're out there in the community, they

meet with some people they used to use the substance with or they see them. But they have to change their lifestyles, avoid going to certain meetings, going to certain places because that's where you meet these people and they're likely to use the substance. If there is a cash flow problem, job situation, the conditions you lay, we can help you with this but, you know, clearly if you are found to be positive, you are going to lose your job - so, that's some conditions you could put. But outpatient treatment is the best - now, if you go back to the methadone programme, a few years ago I visited centres, methadone clinics - outpatient methadone clinics, outside London in an area called Brighton, and we found that patients were not given the tablets to go and take at home. They were expected to come to the clinic every morning, because the methadone substitution programme, whilst still okay, has been associated with some accidental death. But whether it was death because of the medication itself - so far it's assumed that maybe the particular clients had other problems and that perhaps interacted negatively with the methadone, or they took methadone and they still used heroin or something else you know. But both methadone clinics worked well to provide and there was another form of intervention; the use of methadone clinics not just to dish out tablets, but to briefly assess where the patient is on a given day. Um, it's still working in the UK, but there are people here who have different views on this particularly, they are very cautious about methadone substitution. But buprenorphine seems to have kind of provided another answer, you know, it's not an abrupt stopping and dealing with strong craving. It's a gradual kind of stopping, and some people don't need to use methadone or buprenorphine; they continue and survive basically with supportive psychotherapy. But there are those who need further introduction to methadone to completely block the effects and the craving, and it's a protracted process, but what is encouraging is that it can be done on an outpatient basis. You need to have a motivated client who will see the need. But to have a motivated client means you must as a therapist have certain competencies, for instance, you have to have competencies in Motivational Enhancement Therapy. How do you enhance motivation in a client? You have to have training in that, and to improve the client's need to actually follow the programme and respond to what they're being offered.

Monika: *Any thoughts on needle exchange programmes?*

Specialist: Harm reduction is a debatable issue. Unfortunately I have to quote the existing international law within the legislation, which is clearly regulated by the International Narcotics Control Board, and implemented by the UNODC - United Nations Office for Drugs and Crime. Heroin is an illicit substance, and it is listed as such. Now, needle exchange programmes though they are aimed at reducing harm associated with abuse of heroin for intravenous drug administration, they are actually encouraging use of an illicit substance. So by virtue of making the needles available at centres where people can come and inject themselves, and control the amount that they inject - you are also saying let's break the law, let's use this illicit substance. The aim behind this was to reduce the spread of HIV/AIDS from sharing needles and so on. This is a thing that is going to be debated again at the Commission of Narcotic Drugs in March next year (2005) in Vienna. The Commission of Narcotic Drugs meet annually to look at these procedures and harm reduction is going to be one of the dramatic debates, which means a major debate with inputs from different experts and countries - to come to a conclusion as to whether we can recommend it, because if we recommend harm reduction strategies for illicit substances, then the United Nations Convention that deals with this aspect must be changed. It must allow use in the context of control harm reduction settings, specifically for hepatitis, for HIV control and other infections. But at this stage it is problematic, but the second part to it is that countries where harm reduction is used in terms of providing clean needles/syringes and so on, you're not getting a substantial cut-down in the speed of anything that can be spread in that way, and also, it's not stopping people to stop using the stuff, so it's keeping people at the user level, with broken lives and so on. But you're saying you're now doing it hygienically, but doing it hygienically means you are extenuating them as addicts and that is what the problem is. So my answer is that for substances that are as destructive as what heroin is, I think needle exchange provision of clean syringes and so on, is not something you can recommend in a country such as South Africa, in the SADC region, in the African Union countries, because we don't have the infrastructure to monitor, and we don't have the resources to provide these things. So you should still adopt a kind of a leader route based on the United Nations Convention (*United Nations Convention Against Illicit Traffic in Narcotic Drugs & Psychotropic Substances*). However, what I would perhaps recommend at legislation point, is that you have to look at diversion programmes, so that people can say I am an addict, I am addicted to cocaine, it's an illicit substance, and not fear that they be sent to jail. What else can happen? How else can we help, you know. So can't we divert them to community service, the rehabilitation centres, and then from there, we prepare them from living without the substance. I think that is the issue. You know, it's not so much as victimisation, no, but I think let's not throw any and every heroin addict into jail - because that's really filling up jail with people who should not be in jail. And that's why rehab centres should be there, and that means we should try and lobby government to support establishment of rehab centres, either as a part of public service structures that exist now, or separate state funded, so that the costs are not too high. There are a number of treatment centres, as you know, in South Africa that seem to be doing well, are private and are costly, and are not accessible to ordinary people who have average incomes or no income at all. I am not at this stage for our country, and the SADC states and African continent supporting needle exchange. I'm supporting a harder process; but that does not necessarily mean going to jail, but to diversion programmes such as community service and also including spending time at the rehab centres for withdrawal and for detoxification, and I'm saying we should lobby government to provide detoxification centres and

rehab centres within public service structures so that we can have more people reaching out to deal with addiction.

Monika: So you feel that methadone maintenance can play a role to an extent, but that the goal would be primarily to look at dependent free states?

Specialist: Yes, but you want to achieve an ideal which is a drug free life. We do know that even with that ideal in mind, 60% - 70% relapse rate is still there, so it's a protracted thing. If we can reduce the relapse rate to 40%, some people are claiming 50%, which is quite good. But it seems you open the tap that you can never close - you can close it a little bit, but you can't close it completely or it can shut off for a while on its own, but it will open on its own. That is the problem. We have not reached a point where we have predicted, I mean, where we can predict relapses. Why do some people relapse, and others don't relapse?

Monika: Are you familiar with the substance apomorphine used for the treatment of opiate dependence?

Specialist: It's not a substance we're encountering a lot, or using or encouraging in any way, because... in what context are you asking about it?

Monika: I came across it by accident when I was looking at reasonably dated literature and um, the actual literature I came across stated that... they felt that there was purposefully a lack of research undertaken for treatment... although an addict himself who was treated with it, well known - William Burroughs. He felt that the methadone programmes were... that there were political motives for them in America, and that apomorphine research was specifically suppressed. But no one really has information on it. I've come across one research article, one published research article...

Specialist: I don't know much about apomorphine. I do know that some people found it useful as an intermediate process in dealing with serious opiate addiction, but I'm not familiar with its use.

Monika: Okay. Thank you very much.

Specialist: I hope that helps you now.

PARTICIPANT 3

Monika: What interventions, both psychosocial and pharmacological/medical, are in your opinion the most effective in treating heroin use disorders?

Specialist: I believe heroin addiction can be... if it's a medically managed detox, it can be treated on an outpatient basis as long as it's an intensive outpatient, and mainly that should be a six year period.

Monika: Okay...

Specialist: And anyway, the *(Medical)* Research Council said that worked.

Monika: Yea.

Specialist: It's that having to stay locked up for years I think is just a load of baloney.

Monika: Do you think then that it could do more harm?

Specialist: Absolutely. It institutionalises people.

Monika: So do you think then it makes it harder for reintegration?

Specialist: Absolutely.

Monika: You're actively involved with helping addicts and that?

Specialist: No, I'm not.

Monika: Are you not? Are you more involved with policy?

Specialist: I'm more on policy, procedure and training.

Monika: Okay.

Specialist: But I do Twelve-Step work in the Fellowship. Yea.

Monika: Okay. Do you see the Twelve-Step, well the NA and the AA Twelve-Step programme as being useful in the recovery programme?

Specialist: Key.

Monika: Why do you say key? Could you elaborate?

Specialist: It's absolutely key because of maintenance.

Monika: Okay. Any thoughts on maintenance programmes such as pharmacological maintenance and needle exchange?

Specialist: Absolutely. It's got to happen because a lot of people I meet - for example, something like, just to... I believe in pharmacotherapy on a deep level. So while people are beginning to get clean, maybe the stuff like naltrexone, the other one beginning with 's' - that I can't remember.

Monika: Subutex - buprenorphine?

Specialist: Subutex - that's it. That sort of thing. So I believe that's really very useful to assist people.

Monika: Okay - needle exchange programmes?

Specialist: I think they're really important. You know, in the UK, if you're a psychologist, you have to have an add on qualification to be an addiction therapist.

- Monika: *Yes. The qualification criteria in the UK and that is far higher than in South Africa.*
- Specialist: I just have a real problem with that. The Matrix programme is brilliant. Brilliant. We all know that. Hague has adopted it as their model. But you have to be highly skilled and understand addiction on a deep level in order to be able to implement that programme.
- Monika: *And the Twelve-Step programmes?*
- Specialist: It has to be a part of. It can't be regarded as treatment. When it was developed, when the Minnesota Model was developed, it was developed to dry out drunks. To give them some form of dignity, and it worked. I think it's, I believe that we could have far more effective programmes - if we're looking at treatment, for example, inpatient treatment, while working on the 12-steps. I think it's far more... I think we need to bring in the cognitive behavioural stuff, we need to bring relapse prevention stuff and recovery skills - not just 'I'm powerless'. Everyone knows they're powerless - and that my life's unmanageable. That's why I believe Matrix is so good, because it gives hard skills and it allows the 12-step to deal with 12-step stuff. Also, in my experience, the Minnesota Model - um, they try and rush them through the steps. When you get to step four - that's when you start relapsing. Number one because they're very newly clean, so they're shaky anyway. That three month wall period comes in, particularly with stimulant users - you now have to dig into your past, your emotions are too painful, it's a key relapse time, and it's just all too painful - and use is the only way out of that, so I have certain reservations about that.
- Monika: *I can see where you're coming from with that.*
- Specialist: You understand what I mean?
- Monika: *Yes.*
- Specialist: It works, the Minnesota Model works. But it doesn't work if it's only recovering addicts. That's my take on it. That the 12-step forms a part of - but it cannot be seen as treatment.
- Monika: *Is it an active support?*
- Specialist: It's maintenance as well. No, it's not support, it's maintenance. The Fellowship is support; the meetings are support, but just doing meetings in and of itself is not on. I have a friend and she's 23 years clean and sober, okay, and she's got nothing I want.
- Monika: *Meaning?*
- Specialist: Her life - she hasn't dealt with stuff, never actually got her life together. Last year she was in such a state and I said 'you've got to go and you've got to have some sort of treatment, and she has now. She said that in the year and a half in South Africa she's learnt more and she's made more progress that she did in the twenty-three years in the Fellowship. I have another friend who's nine years clean and sober; she's never written anything through the Fellowship. She's a Mandrax addict. She's never written anything down; she says 'I'm powerless over my addiction, my life's unmanageable... and let God deal with it'. She's there, she's never dealt with anything, she's never written anything down. She's never, she recently had to be hospitalised because she had an obsession with a man, and I said to her 'use the step-work as guidelines from Narcotics Anonymous - how's my disease... the first question in the step-work guide is "has my addiction acted out recently; have I been obsessed with a person"...', she will not pick up that - and she's as sick as a parrot. So, you know, it's not treatment, because it stands for the individual, it's not structured, it stands for the individual as to how did I work it. Now in Narcotics Anonymous to be nine years clean is a major in this country. So she's now getting sponsees, and she is passing on what is sweet f*** s***. Now if you run a treatment programme like Matrix where you introduce them to NA, introduce them to - but it isn't just it.
- Monika: *A lack of skill development in South Africa - would this be attributed to South Africa being regarded as Third World in some respects?*
- Specialist: No, we're not Third World. Now in 1993 I was English, I carried a British passport, and I deserved the best. So in 1994 I started to apply for my citizenship of South Africa and I became a South African in 1995. What changed - that I no longer deserved the best? That the standards were so high because we're Third World? We don't say that about diabetes, we don't say that about polio, we don't say that about heart stuff. We don't say that about any other chronic illness. But it doesn't work if it's only recovering addicts. That's my take on it. That the 12-step forms a part of - but it cannot be seen as treatment.

- Monika:* *Could it be, if we're speaking about heroin dependence, the fact that it's a relatively new phenomenon in South Africa - so the expertise is not yet here?*
- Specialist:* It's a brand new phenomenon. In 1996 we saw the first heroin addicts, and I said wait, it will be hectic. We need to get ourselves up to speed on this, because I'll tell you what happens... sounds a bit like the Rhodesians, 'I told you so'.
- Monika:* *So it's a new thing...*
- Specialist:* Yea, but South Africa has not kept up to speed with the rest of the world, if they'd learnt about it, this was because it was seen as a non-white issue and because of the Calvinistic culture of this country, it was seen as a moral issue. So it isn't being seen as a health issue, and still isn't, it's seen as a social problem, and that's it, where volunteers can deal with it, where, you know - people haven't seen it as a primary health condition. There has to be a plan, you've got to be upskilling, there's got to be education, there's got to be, you know...
- Monika:* *Do you think that the criminalisation of heroin contributes to the problem?*
- Specialist:* It's too late, we can't decriminalise it now. It would be ridiculous. We can't decriminalise the drugs. But we must certainly start looking at depenalising the user. The criminalisation was hectic and it was all political. It was politically driven, the 'war on drugs' is political. It's a political thing. If you really go back in history then Britain's really responsible for a lot of it - we hit India - to protect the Indians from themselves I suppose. We discovered opium, and it was at that time that we were doing the Industrial Revolution, and literally the whole of Victorian England were opium addicts and that's the way we managed to - my family was in the wool trade, we had wool mills, and my grandfather... there's actually a village in Bradford, a part of Bradford which is a huge industrial area, and one of the main heroin areas in Britain because it's all Pakistani. Where our mills are, or were - my great grandfather called it Idle, as in they're just a bunch of idle bastards because the laws changed whereby children under twelve were not allowed to work more than a nine-hour day. Okay, so he reckoned it was just idle people. There's a load of history involved in that sort of stuff. The whole Industrial Revolution in Britain was fuelled on gin and opium. And it really was.
- Monika:* *But a bit later... well, I'm speaking under correction, but didn't Britain, before the US, start seeing it more as a medical issue?*
- Specialist:* Heroin... Britain *now* sees it more as a medical issue - but this is a long way down the line.
- Monika:* *I'm talking about the early 1900's.*
- Specialist:* Everybody was on heroin. Everybody was on opium - all the woman were on Laudanum, and you read something like de Quincy's opium...
- Monika:* *Confessions?*
- Specialist:* Confessions and pains of opium, you know what I mean? The working class were all on opium for God's sake and gin, because life was so unbearable, because people like my lot were enslaving them, and when the British broke free, I mean my father imported Pakistanis, because they worked like dogs for no money.
- Monika:* *Thanks a lot *****. I really appreciate it.*
- Specialist:* It's a great pleasure. Let's stay in touch.
- Monika:* *Okay, will do.*

PARTICIPANT 4

Monika: What interventions, both psychosocial and pharmacological/medical, are in your opinion the most effective in treating heroin use disorders?

*Specialist: The Minnesota Model has been used for ten years with success. The average rehabilitation centre is not very successful. The number of people going and the number of those coming right is very slim - you will never admit it, but it's the truth. And it's so internationally so it's not only so in our country, it's like that world-wide. Then, the Americans said this isn't working, so they said, wait a minute, let us look at where the difference is between this small group of people who are rehabilitated, and this big group that hasn't made it, and the only difference that they found was that the small group had a better point of departure - they could make better decisions. You choose whether you will smoke or not, or to drink, or to try something new. You just decide - so information plays a big role. The Minnesota Model is more focused on things like chemical addiction is like a disease. It's not a disease, but the fact that you cannot control it is passive. You're not responsible for having this disease; you're only responsible for what you do about it. Now who's you? The guy with the problem. Not his mother, or the welfare or Castle Carey or Magaliesoord or Noupoort. It's you with the problem, and often the porridge falls on the floor because we don't want to give the group the responsibility. He must take the responsibility to resolve the problem. So yes, that's how I try to do my things and I focus on info, but never alone, there must be a witness. I never see an addict alone. His mother or co-dependant or girlfriend or family must be with for the first info session, afterwards I can see them alone, but when they want info then a witness must be with. I find that works for me, that info session I have with them can last for an hour and a half - then I only speak about addiction and I don't say to him that he's an addict or not. I say, okay, this is how addiction looks - this is what happens. Then, halfway through you can see he can relate and see himself within it. My point of departure is also that I want to learn from the addict, what can he teach me, then I get improved co-operation. The first alcoholic who came to me, I'll never forget, a tall guy. It was my first day at the office. I asked him what I must do. He said 'you must help me'. I asked him what I must do; he said I must find him accommodation, 'us addicts always need accommodation'. He gave me a name - say Ken Barry, and that's how I knew him - always looking for a place to sleep. Then I realised, it amounts to you meeting him on his level. What is important to him, not what's important to you. What can he remember, where is he sleeping tonight? Once that's sorted out, then the alcohol problem can be addressed. Manie Dreyer said 'you must ride super-tube with him'. When he turns, you turn, and I think that makes the difference. And fighting with an addict - that doesn't work for me (*inaudible*). Is your topic specifically heroin, or anything?*

Monika: Interventions, both psychosocial or medical, for heroin dependence.

*Specialist: You see, my concern, perceptions in this world. I don't know how you are going to phrase it in your study, and I wish you could verify what I am about to say. I am not convinced that we say to the alcoholic, to stop you must drink 11 beers tomorrow, and 10, and 9 and then 8 until you eventually stop. I don't know if you work with alcoholics like that, I don't know of it. You say 'listen pal, I see you're addicted - stop!' You don't say tomorrow I'm putting you on a drip or something else in your veins. I realise that some exception occurs for those with medical issues - but it's not everyone who has medical complications or is a medical risk. Now we come to heroin, now we take these addicts to all these medical doctors. If you're addicted to Black Label beer - then we put you on whiskey. If you're addicted to Kraft - then we try Castle lights. All the things that they prescribe - methadone and all those things - is family of the same plant group. So who you're fooling now? How do your heads work? It can't work. I have a woman who's come out of Magaliesoord; by the way she was already two years clean from heroin, big cake and tea and everything - without medication. Then she began knit one, slip one, you know, and then in the end she lost it completely. We sent her to Magaliesoord again. For the first time, she was perfect for a month, a month and a half. Then she began to itch. She went to see a certain doctor, that I hear now is out of the country - temporarily. I don't know, I hope I don't see him ever. Okay. Then she went to see this guy, and he placed her on Subutex, and she stays at her mother. She struggles to get through the month, although she has no flat to pay, she has no expenditures. The brother runs the house with the mothers' pension. Now for a social worker, R12 000 is a lot of money. She blows it, she does short term insurance. She's walking with her feet, she doesn't have a car. All the money goes to the pharmacy, or for the doctor. Those pills work out to R70 for one pill. So who you're bluffing now? Do you want to tell me you're not addicted, just because the doctor gives you a prescription you're not addicted. I can predict that in ten years from now Subutex will be on a list of banned substances. It's ridiculous to recommend it to people. It's just wrong to me (*inaudible*). I always say, if you take ten fingers - the problem that is. They want a job. If you can leave drugs and you've got a job, that's a great beginning, but now you need friends, and it must be friends who don't drink and drug. Now you must get a hobby, and now you must get involved with a sport. Such things, the other thing is that you would do is to get involved with Narcotics Anonymous. Whatever you do, one has to restore your relationships and make your life full. On a Monday evening you might go gym, Tuesday it's rugby, Wednesday evening you go walk, Thursday you go to Narcotics Anonymous, Friday evening you get a pizza and visit your mother or girlfriends or whatever. Saturday - you need to implement structure, because they don't want to do that. But it's necessary, because then you're back in all the old habits, because he's changed nothing of the old things.*

Monika: *Would you support a harm-reduction programme such as methadone maintenance or needle exchange?*

Specialist: That for me is rubbish. I say no. I say addiction has to do with taking a decision. You decide to smoke, if you want to stop - you decide to stop. When will you stop smoking? When the doctor says 'listen here Monika, I think you have a lump in your lung. Oh, what now? No, stop smoking'. So, it's a choice. So you must think about what you're doing, and you must make a decision. So you can make the decision that you don't need medication. I think there is a difference for when you need medication due to a bipolar disorder, or if you have a primary diagnosis, okay, these are exceptions. Those people then need medication. But I am not at all supportive in that now I'm on Black Label beer, now give me whiskey. Or I'm on whiskey; give me Castle light - now I'm okay. Because what will happen... I will just later reach out for three Castle lights for every Black Label that I desire. So in the end the thing snowballs. I can't prove it, but I heard somewhere, I don't know where, in the Second World War a bunch of soldiers got addicted to morphine... they were then given heroin to come off the morphine. They then saw that there were more guys addicted to heroin than morphine. So who you're trying to fool? I say, what I think will happen in the future, is that Subutex and these things will also appear on a banned list. Mandrax started as a legal substance until relatively recently, now it's been taken off of the market. Now what's happening - the drug cartels, and this is internationally a problem, is so strong that no-one can do anything to them. George Bush can make whatever he wishes for oil, or whatever, but the drug cartels, a block away from the White House, he doesn't have to watch a movie to see it - it's there. You can do nothing. The last guy who tried was John F. Kennedy - who left the planet with a bullet in his head, he was shot. So the thing that's happening there, and I think in our country too, I have a report from the United Nations that states that in December, before they closed down SANAB (*South African Narcotics Bureau*) in April, nineteen laboratories in our country were closed down. In April it was dissolved (*SANAB*). Now the stuff that you and I buy in a laboratory for a cold, normal stuff, it has codeine that is the same family as heroin. Somehow these factories or laboratories legally import the stuff or legally make cough syrup with codeine in, or a this or a that, that's what the day personnel do. At night, in the other halls, they make designer drugs for the clubs or the streets - who will know? Who will stop them? A guy from SANAB, the guys from the Scorpions, he saw heroin addicts in the street, and he asked me in my office - do I know so and so, and I said, 'yes, I know him, actually as a crack addict'. No, he's actually a big drug dealer in Pretoria. They went into his office and looked him directly in the eyes and said 'we know you bring drugs in'. He said, 'yes, prove it'. What happens, he takes out a piece of paper, he said he hadn't seen the paper in a long time. What paper, why? He has so much money that when the Scorpions searched him, he laughed and wanted to bribe him for 58 million, of the 58 million, he paid him 38 in cash. That money came from drugs, not from a bank. They saw he drove a Porsche... he paid cash for the Porsche. They realised that they wouldn't be able to catch him for drugs (*inaudible*)... there's so much money in the business. Just on the files in my office, I made a sum, very primitive. The turnover of heroin only in Centurion must be over 70 million Rand, and I have an addict that can say that 'the doctor', which we spoke about, he does a little illegal drug dealing himself. Instead of doing it on the street, you must pay your prescription fee and he gets it sent off to the dispensary himself. I think the government built in that dispensary for him - he takes that money too. And who will know? Because the mother thinks that it will work for my child. Who monitors those programmes? That's what worries me. Look and see if you find someone who has come right - I'll say 'alleluia, use it'. But I haven't seen one. Those that come right don't use medication. Here and there they might have used something for a psychiatric condition or depression condition. I would like to purposefully advocate the Noupoot model. I am a Noupoot fan. I may not say that where I work, but on my motorbike I stopped over in Noupoot... I like the set-up. What I like about Noupoot is the military discipline. The army works like that. If the Corporal says to you 'okay Monika, sit in this chair', nothing will happen to you - but if you sit on the other chair, then you can know I will make you run, or you're going to carry a log, or you're going to do something that's not enjoyable. But if you sat there from the beginning, nothing would have happened. Okay, that's one thing. But what I think works, but by accident, in Noupoot, and I don't think even Noupoot knows it. Their place works because the whole town is actually Noupoot. So where they sleep, and where they eat, and where have church, and where they work is far apart. So these guys from when they wake up, walk to breakfast, then they take the pitbull terriers for a walk and he goes to church, then he goes back to where he sleeps. He's then walked 7km, he's then exhausted. The average city guy sees that as serious exercise. That evening he hardly has the energy to sleep - he's exhausted, he just falls over and he sleeps. Because, a doctor explained to me in Pretoria Academic hospital, that in the synapse where the addiction actually takes place, if you exercise, your brain releases endorphin... which does the same job as the drug. I know what I am talking about, because for ten years I was a provincial cyclist. In my 1st race I rode 10 000 km on a bicycle - that's addictive, but they didn't book me up. If a day came that I skipped training, I'd go through so much withdrawal that if someone argued with me I'd lose it. But after I've cycled, I'm restful and complacent. Now what I say is encourage exercise. Now Katinka at Cosmos, it's a place that I use a lot, it's a mission for people who no longer have money and no accommodation... she's a lovely big woman. I know a big guy who would say, 'your mother brought you into the world, she will take you out'. Now an English guy ended up with her... condensed milk can do as much as the best medicine given at a clinic. These yellow drips put on a guy... you could just as well give condensed milk or caramel. I'm not convinced that they need medication, 'siekte troos' (*pampering the ill*) is a phrase that could be used. 'Siekte troos' can also be a Smartie, you must just think it can help. You know, it doesn't really need to help, he must just think that if he takes

the pill, it will help, and someone must just say 'hey shame, how're you feeling this morning? Are you okay?' just a little bit of pampering. But I don't really think, in my personal opinion, specific medication. The addict will differ from you. They say, 'ooh, I can never do it without that stuff'. So you see, the addict will try. The other day a father came, but very despondent, with this child. The child was in Magaliesoord - ran away, now he's lying in hospital. I have a deal with the hospital; they must first get a letter from me. The hospital and me have a deal, so if he hasn't been with me, he can't get medication at the hospital - at Family Medical Care. Now I realise this trooper has not heard me at all... now that's another thing, addicts are always deaf. They don't hear, you have to take the cottonwool out of their ears and put it in their mouths, then it will go better. And um, what happens, he doesn't hear me. I ask him, 'now the medication that the doctors given you, what's it going to do?' No, he doesn't know. 'Now what must the doctor do, what must he give to you? Why must he give you medication? You don't want to hear me, do it your way, but I'm telling you it won't work, because we've never done it with alcoholics'. We've never said to an alcoholic, 'oh, okay, as second prize then drink a sherry, and it's okay'. He will not stick to that sherry, and so, any mood altering, mind altering chemical... this is how people easily get addicted, and these are the things you need to avoid if you want to recover. You can't say that you have to take a substitute, it's 'siekte troos'. Someone who is perhaps a medical risk, such as hyperventilating or suffocation, or jerking, then 'siekte troos' may not be sufficient. But heroin addicts get locked in prison, and they don't die, they survive. A guy came to my office who was HIV positive. I asked him why he wanted to leave drugs. He said he wanted to change his life. I asked him 'why now'? He stated that he might live longer. I said 'oh', now he's come to the idea, but generally, many guys who are HIV positive don't in any event die so quickly, they realise that they might still be able to live a quality life, and maybe if I leave drugs I might live even a bit longer. So in that case, well a person can't say... but the risk, my gut feel, your study will probably research it, a heroin addict that begins with drugs at school level live until 25. There are some that last longer, but they are the exception. The average addict does not die from heroin, dies from lung infection or something like that. He doesn't realise what he is doing, and ja (yes), that's heartsore for me, but we have to get away from the perception that it can be tapered off, in my books, that thing doesn't wash. But I don't have research to prove it. But the clean addicts that I know - they just stopped. They come to Noupoot and there is nothing, there are no other drugs. ***** that you met is one of them. She ended up in Noupoot. Her mother put it as such; she gave up her human rights for 18 months - taken away from her. She was in Noupoot for 18 months, but today she is three and a half years clean, and is a 2nd year law student at UNISA. So what is so wrong with that picture? Another mother was in the newspaper... her son has human rights. She was in my office... 'you can't send him to Noupoot'. He's dead on the church's steps - overdose. So which picture is prettier?

PARTICIPANT 5

- Monika:* What intervention strategies, both psychosocial and pharmacological/ medical, are in your opinion the most effective in treating heroin use disorders.
- Specialist:* What we try to do is improve their skills, so the programme to build up skills, better communication, better conflict management, better stress, because that's mostly why they fall down - they all fall back, so that is what we're doing. We medically... I believe medication has got a role, a short period, we don't give methadone say longer than five days, plus/minus, but I think there is a role, but not something like Subutex for two years, because we find that they also sort of fall-back on Subutex. So you are substituting one for the other. So I believe in anti-depressants with it, because they fall down - way down - they get depressive afterwards. So ja (yes).
- Monika:* Okay, so the medical intervention you feel then is important...
- Specialist:* Ja (yes), also with the withdrawals, they got a lot of backache, headaches a lot of the time - and then the sleeplessness. So I believe... also what we see, is the moment they don't or they stop sleeping, they also fall back - because that's the main reason for falling back - is not sleeping at night, and then not being able to cope the next day. So we monitor that as well in the beginning.
- Monika:* Is there any specific therapeutic programme or intervention that you think is more appropriate for heroin dependence?
- Specialist:* Well, I believe it's holistically. You get those that only work with the drug dependent. I don't believe that; because most of them are in a relationship - a lot of therapy does not look at the outside, and who else is involved. I believe a holistic approach. So I hardly see any patient without family, girlfriends or mother or whoever is involved.
- Monika:* Do you feel there is a difference between treating someone with a heroin dependence compared to another form of substance dependence?
- Specialist:* Um, it depends on the duration of the use, because a lot of times something like ecstasy or cocaine is used only over weekends - so that does not really interfere with their daily lives, but I mean the programme would be the same, the treatment would be the same. It's just, I think, if you take it... to monitor them, it's a period of time. So for heroin we see if they're clean for a week, and then tested once a month - you have to look at six/seven months - to see if he is really clean. So in that way (inaudible).
- Monika:* Any thoughts on harm-reduction approaches like methadone maintenance, your views on that?
- Specialist:* Methadone maintenance?
- Monika:* Yes.
- Specialist:* Meaning?
- Monika:* Long-term...
- Specialist:* I think you're substituting the problem, also, it's very difficult to administer on an outpatient basis because what happens is a lot of them... if you give it too early in the morning, they start using at night to sleep again. So I think it's just a temporary solution. It won't give them the high, that's why it's better - that's why it's better than the high they get from heroin - but they do use it to get a better high, so ja (yes), long-term - no.
- Monika:* You said that you put them on a five-day course of methadone.
- Specialist:* Ja (yes), as far as I know, they wean it down.
- Monika:* Okay, is that on outpatient, or do they come here and collect?
- Specialist:* They come here and they collect it, everyday if they haven't got a responsible adult, or someone who can take responsibility for that. If they're got that, their parents, or their girlfriend that's not using heroin will give the medication - they give it accordingly and take it as prescribed.
- Monika:* Any thoughts on needle exchange programmes?
- Specialist:* Ja (yes), I kind of feel... I lived in London also for awhile, as you know, you can go and exchange needles, I think that's very important. We see a lot of patients who are coming in now being HIV positive, so if they start that at least, um, your other risks from STD's and stuff would be less, so basically, ja (yes), I believe (inaudible) like that. If they don't come, you don't give them the needles. So that's something you can do just to improve their health, for what it's worth. You see, the patients here, the family is fed-up, the girlfriend is fed-up, and he's on the street - and there's no-way you can rehab a guy on the street. You can't always book them into places like Castle Carey or Magaliesoord. The other thing about Magaliesoord is that there is so much red

tape and they can't go voluntarily anymore - so you need to get a court order. The normal procedures in any case took about three weeks. So now the guy is really into therapy, but you can't keep him off the streets for the three weeks, so a halfway house or somewhere would be the first place to start. But then again, after they are discharged - where are they going? So again, a halfway house after treatment and employment. Some kind of employment because those are the things that also causes them to fall back. The people who haven't got the support systems, and no-one is looking at that, no-one. So for me that's the biggest problem - rehabilitating these guys.

Monika: *So it's a long-term intervention process...*

Specialist: Ja (yes) (*inaudible*), I think you're very privileged with guys who've got fully paid houses, bonds, cars, employment; which we haven't got. So those others are actually very protected, and they're got everything when they come out. The guys who come to see us have got nothing.

Monika: *How do they actually get here? Is there a specific procedure or do they just come?*

Specialist: Mostly the one's that come in are the one's overdosing, being hit by a car, picked up on the streets - halfway overdosed, something like that, and by word of mouth. Because they go back to the streets, the one's that feel they can't cope with the streets say 'got to the hospital - you can get out there'.

Monika: *Is the therapeutic programme run on a daily basis?*

Specialist: It depends on how many times they come. I believe three times a week.

Monika: *Do you find that they come regularly?*

Specialist: What we see is that they do come the first week, and then maybe disappear for a week and then come back. Um, there are the ones, the younger ones that still got employment and they still got family sort of forcing them to come or making sure that they drop them off. They come on a regular basis. Most don't stay longer than six sessions, and most of my patients relapse within six months, for some kind of reason. So it is more difficult for them to pitch up. The other thing that we start finding now is that the police arrest them on the street for being a danger to the public - even though they don't have any medication, needles - nothing on them. So they arrest them now most of the time they are on their way to the hospital so they can't get their medication because they were locked up for the night. They can't come to therapy because they were locked up. So that's another problem for the guys that stay on the street.

Monika: *So it's community based intervention?*

Specialist: You could say it's actually community based theory that we try to base this on. You have to have... something to wear, we don't give them money - don't fall for it; train money or whatever, and then you need a place where they can stay. And there is nothing like that that we could find. So when you discharge, you discharge and that's that. You can't even stay long if there's a crisis. At the moment we try missions, which is also not really working because the control there is not that well. So you haven't been fully rehabilitated, those personnel working there are not interested in doing rehabilitation. So it's not working out in a mission.

Monika: *Are there a couple of missions in Pretoria?*

Specialist: We've got loads - normal homeless missions that we use now. What's also bad is that I've had two people who were being helped by a church organisation, and they've got some kind of house that they house them in. We've tried to say to them that this is a process, and the moment they either smoke or took a drink or relapsed once; they throw them out. So even they that are sort of bragging about the house that they keep them in, is not understanding the process of rehabilitation - that the chance is big that they will relapse. So again they are thrown out by the people from the church who said they would help them, so ja (yes)... addicts in New Lock, we've had numerous conversations with Correctional Services social workers. No-one is helping the addicts in awaiting trial prisons. So they don't give them medication - so they're more aggressive - they get in more trouble and so they're seen as someone who is making trouble, and not someone who is withdrawing. So ja (yes), the programme for people coming in that are tested positive - I don't think there's any. The ones being arrested for either needles, medication or a positive test - they should at least get medication in New Lock, because some of them sit there for three months. It's terrible.

PARTICIPANT 6

Monika: What interventions, both psychosocial and pharmacological/medical, are in your opinion the most effective in treating heroin use disorders?

Specialist: You mean like in rehab and things like that?

Monika: Yes.

Specialist: I think rehab but I think it also has to be with both parents involved, um, I find that the success rate, if you don't have the mother and father involved and preferably siblings, it doesn't work that well. As you know the addict's so manipulative that he immediately knows that one parent is not involved, so we try and get both parents into ToughLove. It isn't very successful, but, ja (yes), it has to be both parents and preferably siblings.

Monika: Okay, so you feel that the support system plays a key role in recovery?

Specialist: Ja (yes), and especially the grandparents are usually the kind of soft touch, if you want to put it that way, and to teach them that ToughLove and rehab is not the worst thing in the world. What I always say to them is, if you want your child to live, rather send them to rehab and follow the programme than have your son, your child - whatever, your daughter or your son die because a programme is not being followed. It is much easier to live with the consequences of a recovering addict than one who died. So the support programme is really, really very important. But also the whole time you stress that it's not you we don't love, it's the behaviour. So the support is there for the addict all the time, even though tough measures are taken, they know that it's the behaviour that you don't like.

Monika: You referred to rehab, any thoughts on the length of treatment, type of treatment? If you're looking at inpatient or outpatient treatment, do you think that heroin dependents can be helped on an outpatient basis? Any ideas on these aspects?

Specialist: There is a centre in Johannesburg, and it's been opened by an ex ToughLove lady, Sheryl Rommy, um, I'm not so sure. I think it's done mainly so that they're able to work, but according to most of the things that I've read and also the American programmes for heroin addicts, they reckon two years.

Monika: Outpatient or inpatient?

Specialist: Inpatient. All are inpatient, yes, because I think with outpatient...

Monika: You're talking about a 'hard core' heroin dependent? An advanced heroin dependence?

Specialist: Yes, and advanced heroin addiction. But I'm not so sure. I mean you know more about this than me. If there is somebody who is not... if you could call somebody not a serious heroin addict. I think once you're on heroin it's serious. Um, parents have said to me 'it's only dagga' (*cannabis*), I always say to them 'it's not only dagga (*cannabis*), because it will lead to something else'. Just like nicotine smoking is an addiction, you have to look at it as an addiction. So I think inpatient rather than outpatient, unless it's going to destroy the rest of his life and he's going to lose his job, um, preferable I would say inpatient and long term - two years.

Monika: Any thoughts on medical intervention?

Specialist: Well, I mean you probably know that Noupoots' treatment is... you don't use other drugs to get them off the drugs that they're on. Um, I'm not so sure; I don't have any medical qualification, so I can't say whether there are instances where you have to use medication. I would rather say preferably not, but if you absolutely have to, if you absolutely cannot avoid it and there is no way, then you would have to, but preferably not because you're teaching him, just like you teach a child by being abusive toward them, that that's the only way you can cope with problems - that well, let me use one drug to get off another drug. If it's not at all possible to come off it without using another drug - absolutely, and I think that most of them, as in the Noupoot programme, should be made to give up smoking eventually as well, because addicts... it doesn't matter what they're addicted to, be it nicotine, be it any kind of drug that's an addiction, and it's obviously in their make-up to have an addiction, and I think also that it included alcohol. It all leads onto other drugs.

Monika: You referred to maybe some exceptions, were you referring specifically to withdrawal or are you referring to a maintenance programme, like a methadone maintenance programme?

Specialist: Um, I would for withdrawal... if the people involved in the rehab feel that this particular person would not be able to go through the withdrawal without having other medication, and obviously the other one to get them off the drugs... a lot of parents have found it very successful. In our groups, in the ToughLove groups, they've said well that worked, you know, for my son. It hasn't worked for him to go to Noupoot, to go through their tough programme. But I must also say that that's after they're maybe done two stints at Noupoot and then come out and they've relapsed maybe the third time and the parents have said 'okay, let me go this route'. I don't know if you've

heard that Mike Bollhuis has got a couple of youngsters - where he's looking after, but he basically puts them under house arrest.

Monika: I've come across one case, but I'm not familiar with the set-up. I've heard about him from television, but I don't know what's going on there.

Specialist: Well, basically what he does is he takes the parents, he does programmes with the parents, he does programmes with the addicts. He places the addicts' under total house arrest, under his parents care.

Monika: It's similar to ToughLove?

Specialist: It's similar to ToughLove, but the point is he's putting the whole, the whole family under house arrest, which I feel is very unfair, and whereas when they go to rehab, at least the family is able to put their lives together again.

Monika: In what way is the family under house arrest?

Specialist: Well, in the sense that every time the addict... every time the mother wants to go out, she's got to take the addict with. If she wants to go shopping, she has to take the addict with her. If they want to go to movies, they have to take him with her. So he has to be involved with everything, otherwise they can't go. They cannot leave him at home alone. So he's under constant supervision under his parents. So the siblings all suffer as well.

Monika: What is he?

Specialist: Well, Mike Bollhuis used to be involved in the clubs, in the rave clubs as a security person - as a bouncer basically, and now he has a security firm. My personal view - don't agree with it. There's been a lot of stories about it. They use quite bad corporal punishment apparently, which I won't agree with that, 'cause that's totally against the ethics of ToughLove. Not even parents should beat their children because all you're doing is you're - first of all the addict doesn't absorb it because he's an addict you know. You have to treat him like a cancer patient. You can't be with him, he can't help it at the time - it's an illness, hey, we don't agree with it at all. I can't comment on it further because there's two parents in our group here who's sons are with Mike Bollhuis, and I think they're desperate you know. The one son was in Noupoot twice, he's been in rehab so many times - and they say he's doing well you know, both of them are doing well, but, what happens when they're not under house arrest? You're not treating the causes; you're only treating the symptoms. Like giving a Disprin, the headache goes away, but what about underneath that? You know, once again, to get back to therapy, you've got to treat all that stuff, 'cause rehab is about physical addiction, that's what it's about. In twenty-eight days out of the system, but why did they start using in the first place? What is in that child to make him go back every single time? Obviously strength is the one thing. So what is it? You've got to treat all that stuff as well otherwise you land up in the same situation as my daughter - and that I say would be interesting - to find out how many of these relationships fall by the wayside because of basically self destructive behaviour. I don't like myself, I don't like me, whether you're an addict with a drug or an addict in behaviour, you know.

Monika: Do you think there's a difference in treating heroin dependence compared to other forms of substance dependence?

Specialist: No, I don't think so. It might be the severity of it, or perhaps how many times you use it, but the addiction is a symptom of something else, why are they using it? You know, even if some young girl is using appetite suppressants, why is she using it? Sleeping tablets - whatever it may be, there's an addiction and there's a reason why, you know, that destructive behaviour has something to it. I mean, kids don't just wake up oneday and decide 'well, I'm going to use drugs'. Initially they might say well let me experiment, an ecstasy, or let me experiment, but then very few who say 'hey, I don't like the experience', or 'I took it to feel what it feels like, I'm not doing it anymore', there are those obviously, but the others who carry on taking and the behaviour becomes more destructive. There's something behind it, some... even nicotine, it's an addiction, drinking you know, if you feel you have to have a drink every night.

Monika: It's all obsessive-compulsive behaviour?

Specialist: Yes, and it's always something... I don't know, if you're looking at adults, something they're not coping with in their lives. If you're looking at young people, they think they're not coping, self-esteem or whatever if may be, but no, I think addiction is addiction.

Monika: Any thoughts on harm-reduction approaches such as needle-exchange programmes or methadone maintenance programmes?

Specialist: You mean like they're doing overseas? Counties where they actually supply it?

Monika: Yes, clean syringes. Basically it's an AIDS campaign.

Specialist: Boy that's a kind of very emotive, you know, discussion because there are obviously advantages because you're getting clean needles, and they've been given a fix and you're not going to break into people's houses, I mean, ***** who we were discussing before, had he perhaps been - had a programme like that, and had he been on that, you could say maybe he wouldn't be in jail today, because we would have been treating his habit, but, at the same time, is it moral to actually do that? Is it moral to say to kids 'okay, well then you know it's really okay, it's quite fine for you to come and have a fix', but then on the other hand it's like... the church is telling young people to abstain. If they're already into sex, are they going to abstain? My opinion is no, they're not. Because once you've experienced it, you want it, unless you have a radical change where you say the second virginity thing that a lot of youngsters are doing, but whether you stick to it or not is another thing. Okay, so do you supply drugs and say we're doing a good thing because we're not spreading AIDS, or do you say, we're really doing a bad thing because we're actually saying to kids it's okay to drug? So it's a very emotive thing. I mean, I would say... and how do you identify who are drug addicts? You know, how do you identify somebody who might say, 'oh well, seeming that they're supplying it, and seeming that they get clean needles, I might as well go and try it'. So you draw somebody into it who might have never been drawn into it before, and I don't care what the fear is behind it, as long as they don't try it. You know, if the fear is, 'I might get AIDS', and not 'I don't want to use heroin', it doesn't really matter, you know, it's the same with, um, STD's - sexually transmitted diseases, um, do you say to kids 'you know what, if you're having oral sex you can still get sexually transmitted diseases plus AIDS, so what we're saying is abstain all together, you know, get yourself pure, if you want the old fashioned word, until after you're married. So for whatever reason, it really doesn't matter as long as they abstain, either from sex or the drugs. But if you're into that behaviour, you're not going to change that behaviour, you're not, unfortunately. Um, and then do they go to rehab? Why would they go into a rehab and actually kick the habit if it's being supported? That's the other thing, what motivation is there for you to actually kick the habit? You've got to change the process around where you going to build up self-esteem so they don't use drugs, but once you're an addict, you can't build up self-esteem until you're off the drugs to actually get through to them. So no, essentially I would say it's not a good idea. It would be much better for... and the talks that I give, I normally say to parents if you have small children you need to build up their self-esteem, and first of all you need to build up your self-esteem; your own self-esteem, because if you don't, children listen and watch, and that's how they learn. And they, especially mothers', they learn bad self-esteem from them because we criticise our bodies, we criticise our hair, we criticise our legs, and so, little girls watch and they grow up where they have that kind of conflict of 'if I'm not perfect, then I can't cope basically'. So you... so the inner strife from scratch, from the start, if they're really addicted, how do you get them off it, and if you're supplying it I think it's immoral.

Monika: *I think that was kind-of the needle exchange argument, is that if people are using, and they can't get off, then you've got to try and reduce the risks involved -similar to the other scenario you mentioned with contraceptives and that.*

Specialist: Of course the other option... you know if you're looking at options, is to monitor it within a rehab centre, or within a centre like SANCA, but if somebody is monitored, you know people will come in, you've then got to actually admit them, you've got to ascertain whether they're addicts or not. It's such a difficult thing to actually monitor. I mean, it would be very interesting to see statistics in the Netherlands, or how it worked, has people, children, if they were addicts before, did they become addicts? Um, people who weren't interested in drugs, did they go try because it's freely available? Those kinds of scenarios - how do you persuade young people today not to come in and try it? You know, I mean, how do you actually say to them 'this little thing, to actually go and try it, and just because it's being supplied, doesn't mean you must actually go and try it or use it', because you're giving them a mixed message. The government is saying you can supply it, but if you're not an addict you must not use it. Those kind of arguments don't hold.

Monika: *Dualistic?*

Specialist: Ja (yes). Just like at home, both parents have to have the same kind of discipline, if they don't, it doesn't work because immediately one parent forgets the other, and if you don't have any discipline at all, then you basically have kids that run wild.

Monika: *Thank you so much for your participation.*

PARTICIPANT 7

- Monika:* What intervention strategies, both psychosocial and pharmacological/ medical, are in your opinion the most effective in treating heroin use disorders.
- Specialist:* (long pause).
- Monika:* Do you think that there is a difference between heroin dependence compared to other forms of addiction?
- Specialist:* I think so, yes. There is also a difference in degrees Monika. Something, I mean you saw that time with ***** who withdrew severely, and others that don't withdraw so severely. They're different, they definitely differ.
- Monika:* Is there any specific medical recommendations that you would make?
- Specialist:* You mean better than what we are already doing?
- Monika:* Yes, not specifically, what we do now or anything else.
- Specialist:* I think that what we do now is sufficient.
- Monika:* For all degrees of heroin dependence? Is treatment period a factor?
- Specialist:* You know, I think one has to evaluate the patient, as I said, the degrees differ so. I think one must work according to the patients' needs. You must tell the addict that you are going to treat him according to his symptoms. If he begins to withdraw severely, one must treat him uninterrupted for ten days, but if he does not withdraw severely, you should treat him symptomatically, if his stomach aches, or if he can't sleep, or if he craves. But otherwise if he's like ***** , as I said, you must treat him uninterruptedly; you must not ask him if he wants a pill, you must just give it.
- Monika:* Is there any specific medication that you would recommend? Or do you feel that one should work more symptomatically?
- Specialist:* That which we presently use - sleeping medication, Librium three times per day, Brazopam for the cramps and Dixarit for the craving. I really think it's adequate
- Monika:* Do you feel comfortable with other opiate medications?
- Specialist:* Which opiate medications?
- Monika:* Mainly Physeptone.
- Specialist:* No, Physeptone... I don't really have a problem with it, but the doctors' feel that it lengthens the addiction, you basically just continue with a substitute. What's that other thing that they use?
- Monika:* Methadone...
- Specialist:* No.
- Monika:* Subutex... buprenorphine?
- Specialist:* Yes.
- Monika:* Do you feel the same about Subutex?
- Specialist:* I think so, yes. You know, they bluff themselves, yes. We get a lot of enquiries from people that want to come for treatment, but say that they've been so long on Subutex... but they just lengthen their addiction because they are bluffing themselves, understand? I feel that what we do not... okay, there may be certain cases that are very severe were you would intervene maybe physeptone.
- Monika:* So you feel that for certain severe cases...
- Specialist:* Yes, but it must be the exception. It's not a thing for every heroin addict. Of the cases dealt with in this clinic, I would say it's approximately 3%, I don't know, that's so severe. Look, I remember ***** as an example.
- Monika:* Although he didn't have a very long history of heroin dependence, it was just very intense.
- Specialist:* Badly. I remember him falling forward, cramping on the floor with stomach pains.
- Monika:* Yes. There was also that one other patient, do you remember?

- Specialist: The one that slept on the floor that went home?
- Monika: Yes.
- Specialist: Was it this year, no longer...
- Monika: *Last year I think.*
- Specialist: I don't know. You know Monika; I think if people bring a person in for rehab, family should not be with. If family is with, then look, patients' withdrawal, he manipulates actually.
- Monika: *Psychologically with aspects of withdrawal.*
- Specialist: Yes.
- Monika: *Is it similar to withdrawal from other forms of substances of abuse?*
- Specialist: I think so.
- Monika: *What other substances?*
- Specialist: Are you only talking about drugs?
- Monika: *No, all dependency producing substances*
- Specialist: All addictive substances, yes. I think when a family or somebody that is involved, who is close to the patient, yes, I think the addict can manipulate through withdrawal as well. Especially a person who is not really serious about his rehabilitation.
- Monika: *You mentioned earlier that you think there is a difference between a heroin dependence and other substances that induce the same level of physical dependence?*
- Specialist: Monika, I don't really have an answer. Recently we have not really had difficult cases. No, I don't believe so. But heroin addicts do stand out, but they are for me... you can deal with them. It's only here and there, like I said 3% or 4% that are maybe these severe cases, but otherwise they are not for me so different from the others. They socialise also well in a group, so they are not different from the others.
- Monika: *I think there is... well if one looks in the literature, they say that benzodiazepine withdrawal is actually more severe than heroin.*
- Specialist: I thought you were only speaking of the 'harder' drugs.
- Monika: *No, all substances. I think there are stereotypes due to the illegality of heroin.*
- Specialist: No, yes codeine addiction and Lexitan, yes, benzo's, yes,
- Monika: *And alcohol withdrawal?*
- Specialist: Okay, there is a link actually between everything, but your pills and drugs are closer together than alcohol and drugs. Pills and drugs you can compare a bit, they have similarities.
- Monika: *In terms of the pattern of withdrawal?*
- Specialist: Yes, more or less similar. I think that drugs are only a 'harder' form of the pills, is it not? Like pethidine and those things.
- Monika: *It's an interesting point. There are people who have the opinion that there isn't much of a difference.*
- Specialist: I don't think there is really. I think the pills such as pethidine is probably just a more refined form of the original drug.
- Monika: *To get back to Physeptone. The thought behind it is what they call 'harm reduction'. If you can't get someone to come clean of heroin... it's done overseas and it's a relatively recent concept in South Africa as we don't really have many long-term heroin dependents as yet. One view is that if you cannot motivate an addict to come off heroin, or if he doesn't want to or can't come off, then one must consider methadone maintenance. If you can get a heroin dependent to use a legal substitute he can have enough time to stabilise other aspects of his life, like family, that they get away from criminal aspects of heroin dependence.*
- Specialist: But with the goal that he will ultimately completely abstain?

Monika: *Well, I believe that is the stance of harm reduction approaches, but there is also the view that there may be certain cases that may never recover. So it is controversial, but that's the approach. It's not the only harm-reduction approach, there is also, you have probably heard of it, the needle exchange programmes.*

Specialist: What programme?

Monika: *Needle exchange programme used overseas, it's also a harm-reduction approach. What they're saying is that you can't expect a guy with a chronic history of heroin dependence... if you can't help him to recover, if he's been through numerous unsuccessful treatments, then you need to minimise risk factors such as AIDS and Hepatitis B and C. So what they're saying is that clean needles should be supplied. They have specific zones where the addict can make use of it.*

Specialist: Monika, you know I don't actually agree with it because it's decadent. You're actually encouraging the addiction and you're not going to stop it like that because I don't think that one guy who's really severely addicted... you will not be able to maintain a dosage of that, that's my experience with addiction. I mean he will always want more. I think that to take such a stance is the same as the concept of condoms of AIDS.

Monika: *It is the same thought.*

Specialist: You're encouraging it on. It's just decadent. I am (*inaudible*) but I feel such about it, you're encouraging it on. I mean these people who are addicted also have children; they see this thing, do you understand? No, it's probably not what you would like to hear, but it is really... morally it is not right to me, and also I don't think that you're doing it in the best interest of the addicts' health. You are not bringing him to a point of stopping. At some or other point he will continue using. He will not maintain his dosage, he will some or other time overdose. I mean, he won't come right.

Monika: *Yes, it is very controversial. They have been discussing it in the United Nations. Needle exchange is closely linked to the AIDS epidemic.*

Specialist: I don't believe it will work. On the spiritual side it is really decadent and it will not solve the problem. That which they are doing is they are doing is wrong, it isn't right. Our plight is to help these people, to get them off.

Monika: *Thank you so much for your participation.*

PARTICIPANT 8

- Monika: *What intervention strategies, both psychosocial and medical, are in your opinion the most effective in treating heroin use disorders.*
- Specialist: I don't know what you're speaking about.
- Monika: *What medical... it's basically about what you think will help someone with a heroin dependence. What do you think is the best approach to deal with it medically, and also with regard to therapeutic intervention.*
- Specialist: Shoe, Monika that's very difficult. We've had a couple of heroin patients here and not one of them really react the same with regard to medication, for example, um, if you take Lapalame's patients, they go easier through withdrawal compared to the older, senior drug patients.
- Monika: *Why do you think that happens?*
- Specialist: I don't know. The children... the young people have maybe not used the drug for so long. Take *****, he's been on the drug for three or four years, and he's really struggling badly with withdrawal. Is he just more squeamish, or is it really harder? The children, because they are close together and it's a closed unit, I think it's easier for them. The guy we admitted yesterday for heroin, he hasn't once come to ask for anything (*medication*) and he's also on heroin and dagga (*cannabis*).
- Monika: *So do you think that the withdrawal is not always as intense as what they make out?*
- Specialist: Yes.
- Monika: *And you say that it depends on how chronic their heroin dependence is?*
- Specialist: Yes.
- Monika: *Are there any specific pharmacological medication that you would recommend?*
- (*long pause*).
- Specialist: Um, I think that the regime that our doctors prescribe is the... it's Librium a quarter three times per day, together with the Dixarit (*clonidine*), it really helps, and for the cramps, Scopex.
- Monika: *So you feel that symptomatic treatment is effective?*
- Specialist: Yes.
- Monika: *Okay. You are probably aware of what they call 'methadone programmes'... making use of substitute opiate medications such as Subutex and physeptone for the long-term. Any opinion concerning substitute medications?*
- Specialist: I think the patients become quickly used to those things; it's just another form of the heroin.
- Monika: *Okay. Any thoughts concerning the duration of treatment? Do you think that inpatient treatment is necessary, or not really? Could one consider only detoxification?*
- Specialist: No, it should be inpatient treatment where they are in a safe place and where they can receive 24-hour treatment.
- Monika: *Any thoughts with regard to the duration of treatment?*
- Specialist: Um, the six weeks sound maybe right, and it sounds long, but I think six weeks is very short for a guy that's addicted to heroin.
- Monika: *How long do you think would be more suitable? Just in general, even though each case would differ.*
- Specialist: I think at least eight to ten weeks; I think that should be sufficient.
- Monika: *There is an approach that is called 'harm reduction' and basically what it implies is that if a heroin dependent cannot or does not want to stop, for whatever reason, then the point of departure of the approach is that the harm that they do to themselves should be minimised. So that's where the whole idea of substitute medication, so that they can stabilise over a long period of time on a legal and long-acting medication, so that they can at least distance themselves from a criminal world and all that stuff. Within the same approach that substitute maintenance resides under, 'harm reduction', the 'needle exchange programme' falls also in this category. We don't have it in South Africa, are you aware of it? What they do overseas?*
- Specialist: No.

- Monika:* Okay. Basically it differs from country to country. There are different methods and it's linked to the AIDS epidemic. What they advocate is that if someone cannot stop, then you must at least try to prevent the spread of AIDS and Hepatitis, and provide clean needles. Any thoughts about that? Do you think one should consider it?
- Specialist:* I think it's wrong. Are you saying then that if he cannot quit, then in other words we give him the stuff but that he must use it carefully?
- Monika:* No, that's not what the rehabilitation centres do, that's an initiative of the State. It's similar to the condom campaign concerning AIDS. The same thing applies to any person who's using intravenously.
- Specialist:* You should educate us more about drugs. I mean, I admit patients and I search them, everything, but I want to see it, what it looks like.
- Monika:* Do you feel then that there is a lack of information in general?
- Specialist:* Yes. I don't know how other people feel, but I don't know enough.
- Monika:* Thank you very much for your input

PARTICIPANT 9

- Monika:* What intervention strategies, both psychosocial and pharmacological/ medical, are in your opinion the most effective in treating heroin use disorders?
- Specialist:* Pharmacological... Subutex.
- Monika:* Is there any... do you have specialised training with regard to Subutex?
- Specialist:* Yes.
- Monika:* What in your opinion makes it superior to other medications?
- Specialist:* It's a blocker, it takes away craving and you can use it for withdrawal, and they can carry on and function like normal people.
- Monika:* So you're looking at Subutex maintenance?
- Specialist:* Ja (yes).
- Monika:* Depending on the length of heroin dependence?
- Specialist:* No, on the patients... some people use it for six months; others use it for a lot longer.
- Monika:* So the maintenance would depend on a lot of different factors?
- Specialist:* Ja (yes).
- Monika:* Social, physiological...
- Specialist:* Ja (yes), it's individual.
- Monika:* Okay. Um, your opinion with regard to methadone?
- Specialist:* They get addicted to it very much.
- Monika:* Is it a higher risk?
- Specialist:* It's a higher risk, ja (yes)... and it's not as effective. Not nearly as effective
- Monika:* Could you elaborate?
- Specialist:* It doesn't work as well as Subutex. I think that there are more relapses, and it's also not good for their teeth.
- Monika:* Methadone?
- Specialist:* Ja (yes).
- Monika:* Due to the sugar?
- Specialist:* Ja (yes)?
- Monika:* Okay.
- Specialist:* We've got physeptone.
- Monika:* Yes, is that also very sugar laden?
- Specialist:* Lots of sugar. Overseas, there's methadone tablets and things... but we haven't got it.

- Monika:* Um, methadone and the other medications that are used symptomatically... such as benzo's and also...
- Specialist:* I don't use benzo's, no...
- Monika:* Ja (yes).
- Specialist:* Aterax.
- Monika:* Aterax, yes. In South Africa still a lot of the clinics use clonidine.
- Specialist:* Yes, yes.
- Monika:* In your opinion, is it of any benefit in the long-term. Or is it of limited benefit?
- Specialist:* It might help with the withdrawal, that's all.
- Monika:* Okay. You familiar with apomorphine?
- Specialist:* What?
- Monika:* Apomorphine, just out of curiosity. Do you know anything about it in the treatment of opiate dependence?
- Specialist:* I've never used it, but I would still rather use Subutex, for morphine dependence as well...
- Monika:* And codeine?
- Specialist:* And codeine, yes...
- Monika:* Any opiates?
- Specialist:* Yes, all the opiates.
- Monika:* Are you familiar with the workings of apomorphine?
- Specialist:* Not completely, no.
- Monika:* In South Africa it's still not well known.
- Specialist:* Ah ah, we don't actually use it.
- Monika:* It's not used anywhere... much.
- Specialist:* I think in Australia, I think Australia used it for awhile.
- Monika:* For very chronic opiate dependents.
- Specialist:* Ja (yes), but Australia now uses Suboxone.
- Monika:* Ja (yes).
- Specialist:* It's Naloxone and Subutex, which is even better, but we haven't got it.
- Monika:* Any thoughts on needle exchange programmes?
- Specialist:* I don't think it's a good thing.
- Monika:* With the AIDS epidemic and in harm reduction approaches, it is also what the Subutex and methadone maintenance - it is also about harm reduction, and stabilisation.

- Specialist: JA (yes).
- Monika: *Um, needle exchange... do you feel that that falls in another category?*
- Specialist: Ja (yes), I think it's pushing the limits, to give it to a guy.
- Monika: *How so?*
- Specialist: I don't think it's right, and naturally heroin as well... if he's going to get heroin as well... so that he doesn't get arsenic in the heroin that he buys on the street, or whatever.
- Monika: *Although there has been heroin maintenance.*
- Specialist: In Holland...
- Monika: *England used it, at one point in time, for addicts.*
- Specialist: But it wasn't very successful...
- Monika: *Well, they say it can be if you... well, maybe not... I suppose it's similar to methadone.*
- Specialist: I don't think one should fight with a guy that comes and says that he had a relapse... but I don't think that you should give him a needle, no definitely not.
- Monika: *Some of the other specialists that I interviewed felt that you know, it might be of some benefit if you're looking at an AIDS epidemic..., and if the heroin epidemic got worse, and if heroin intravenous use got worse.*
- Specialist: I don't think so...
- Monika: *You don't think that it would help at all?*
- Specialist: It's definitely not going to curb the AIDS epidemic... it's going to stay in the drug using community.
- Monika: *What do you think would help?*
- Specialist: I think they must be admitted for treatment, ja (yes).
- Monika: *Inpatient treatment?*
- Specialist: Inpatient treatment. There must be a social worker and they must have jobs when they leave. A lot of them come in here, very clean and everything, six-weeks, they leave - to what?
- Monika: *Mmm.*
- Specialist: Same flat that she shares with another addict and the dealer stays two flats down the passage. Still doesn't have a job... it's a social problem.
- Monika: *That's true. You mentioned inpatient treatment, any thoughts on the duration?*
- Specialist: At least six weeks.
- Monika: *Do you think that they could benefit from longer treatment?*
- Specialist: I'd prefer longer - ja (yes).
- Monika: *Okay, and if it were two years would you say that it is too extensive?*
- Specialist: Two years?

- Monika: Ja (yes).
- Specialist: Well, not for some people. Three to two years the chances for relapsing I think is much smaller.
- Monika: *Any thoughts on specific psychosocial intervention? What do you think one should focus on therapeutically, or in practice? You do have a very strong therapeutic stance from what I've seen.*
- Specialist: Ja (yes).
- Monika: *Um, do you, do you feel any specific type of intervention - or are you focusing on the basics: residential treatment with a multi-disciplinary team.*
- Specialist: Ja (yes) - I feel that Subutex should be used, one must see a psychologist, including everyone (*multi-disciplinary team*), and stay away from the old using community, if you can keep to those basics, then you clean; and you will stay clean, I think so.
- Monika: *Any other... I don't know if you are aware of the legislation and policy that's now being debated in South Africa. Do you think that South Africa should implement any specific plan? There is the (National Drug) Master Plan - but there's plans to implement the 'Plan' (laughs).*
- Specialist: So it's a master plan.
- Monika: *In the newspaper yesterday, the Mini-Master Plan.*
- Specialist: There's many!
- Monika: *Do you think that South Africa is at this stage... if you compare with strange... if you compare with... you were around when it started, when the heroin epidemic started, do you think that South Africa is addressing it?*
- Specialist: No.
- Monika: *What do you think? You have been overseas; you've seen how they're addressing it...*
- Specialist: Compared to what happens in Australia, Canada and England, I mean... we just saying take Valium and sending them home. That's it.
- Monika: *Do you think that's one important aspect in addressing the problem, is looking at the medical regimes in a lot of the facilities?*
- Specialist: Ja (yes), and treatment should start then. Your best chance is your first time.
- Monika: *Yes, yes. What you referred to then is that is should be a high level intervention from the beginning?*
- Specialist: Ja (yes).
- Monika: *Not four times down the line and then only try therapy - actually preventative in a sense, because it's high level early intervention?*
- Specialist: Many get Valium, then they might get an appointment six months later at a psychiatrist, you and I can make an appointment for after six months - he's not going to make it, it doesn't work that way. Another thing is they must deal with the drug smugglers, and I think that this is where the county's biggest problem lies.
- Monika: *We have limited resources, well, they not being used...*
- Specialist: I must say, I don't think we have limited resources. I think it is... the priorities are wrong - the ministers BMW is more important than a cop to get them. But, look at the majority of people who are not coming for treatment, there is a lot of money flowing, how many of our patients are now black.
- Monika: *Yes, South Africa is unique in that respect.*

- Specialist: It will become more and more and that's what government fails to realise.
- Monika: *Although yesterday, it's the first time in a while, I don't know if you read the newspaper?*
- Specialist: No, I just read the headlines.
- Monika: *Well, they say they're going to make more money available to rehabs.*
- Specialist: Ja (yes), but they mustn't just throw it in.
- Monika: *Yes, they need to get the right skilling of personnel. Upskilling of personnel.*
- Specialist: Good, good. In many rehabs they putting mats on the floor and DSTV, but there must be a social worker and psychologist that knows what they're talking about.
- Monika: *Upskilling of staff?*
- Specialist: Upskilling of staff.
- Monika: *You've worked in Phambili and here... but, I've worked in other facilities, there aren't skills.*
- Specialist: Did you work in Phambili?
- Monika: *No (laughs)... and I'm glad I didn't (laughs)! Do you feel boundaries in treatment are important?*
- Specialist: There must be boundaries. Remember, heroin addiction is a physical disease.
- Monika: *Classified as a physical illness.*
- Specialist: There's a difference in PET scans between a normal person and a heroin addict.
- Monika: *Yes, but that's heroin induced. Neurological pathways can be altered.*
- Specialist: Ja (yes), its heroin induced, yes.
- Monika: *Okay, but it's not a typical illness.*
- Specialist: It's not a typical...?
- Monika: *It's an illness, but not a typical illness.*
- Specialist: It's an illness.
- Monika: *It becomes a sickness.*
- Specialist: Yes.
- Monika: *Are you familiar with the maturing out hypothesis?*
- Specialist: With the what?
- Monika: *The maturing out hypothesis.*
- Specialist: No.
- Monika: *Not?*
- Specialist: I think... everyone stops eventually.

- Monika: *Not everyone (laughs) - but one sees it specifically with heroin dependence, where there is a tendency toward remission between the ages of thirty/ forty.*
- Specialist: Yes.
- Monika: *Yes, aware of it?*
- Specialist: Yes, if they don't die.
- Monika: *If they don't die, which doesn't happen with alcoholism. I just want to ask you, I've come across it and I wonder what your opinion is, if you look at organic damage that heroin does, pharmacologically pure heroin, not now the mixed stuff that one gets on the street. Does alcohol cause more organic damage than heroin?*
- Specialist: I think so, yes.
- Monika: *So then alcohol is more dangerous in the sense of organic damage, but heroin has a whole sub-culture?*
- Specialist: That's interesting, I never thought of it that way.
- Monika: *Well, they say that, and it would be interesting to get your opinion on this too, that heroin withdrawal isn't fatal, whereas alcohol withdrawal can be fatal, and benzodiazepine withdrawal.*
- Specialist: Heroin withdrawal is definitely not fatal. Probably the worst of them all, but definitely not fatal. I don't think a lot of people have died from alcohol withdrawal.
- Monika: *I'm not certain about that, but it's known to be... from some of the psychiatric texts that I've read, alcoholism and benzodiazepine withdrawal can be fatal, whereas opiate withdrawal is not known to be fatal.*
- Specialist: No its not, with alcohol withdrawal you can get epilepsy.
- Monika: *Mmm.*
- Specialist: Which could be fatal.
- Monika: *Maybe that's what it's alluding to.*
- Specialist: With benzo withdrawal you can get epilepsy as well.
- Monika: *DT's?*
- Specialist: No, DT's... not.
- Monika: *Sorry... that's dementia tremens. It's an actual fit.*
- Specialist: I feel I need to think about this.
- Monika: *Ja (yes), there's a lot of social aspects to heroin.*
- Specialist: If alcohol was discovered today, it would have been schedule 9 or whatever, no questions about it.
- Monika: *Well, that was an interesting thing that happened. I've submitted an article to the African Journal of Psychology - that's now my master's research, heroin intervention, I mean recovery, and um, one of the comments were, of one of the peer reviewers, but I have changed it in order not to create controversy, to avoid any controversy, but, um, I wrote in my abstract that, or I implied that not all heroin users become dependents. Usually... in one of the comments, he said that due to the physiological nature of heroin, all users become dependent... but that cannot be true, because if you look at alcohol, alcohol is also physically addictive.*
- Specialist: But not everyone gets addicted to alcohol.

- Monika: Exactly.
- Specialist: But everyone that uses gets addicted to heroin.
- Monika: Not everyone.
- Specialist: If they use it once or twice, no problem.
- Monika: *Well, there's documented cases in the UK where they actually talk about... it's a term they use, it's called 'chipping' - they're 'chippers', and those are mainly people who are... it's a matter of opinion whether they are addicts or not, but they don't use daily, they use maybe over the week-ends or whenever - but they stick to very stringent um... boundaries, if you like, in terms of who they use with and that kind of thing, which we've seen over the centuries with other drugs, it's not only heroin, um, it may be a matter of maybe they just on their pathway to dependence.*
- Specialist: Aah, I think they on their pathway, it may take some people five years or ten years, but eventually if they keep on using it, they going to get addicted.
- Monika: *But wouldn't that also be the same for alcohol or benzo's or any other physically addictive drug, is heroin more addictive?*
- Specialist: No, we all drink for years, but we definitely don't all become alcoholics, or get DT's for that matter, if you don't drink.
- Monika: *Surely the same then would apply to any other substance?*
- Specialist: A person that uses heroin will definitely become addicted after a week.
- Monika: Okay.
- Specialist: I have no doubt about that.
- Monika: Okay.
- Specialist: I could drink a bottle of whiskey everyday for a week and not become addicted.
- Monika: *A bottle of whiskey everyday for a week, I think I'd be addicted.*
- Specialist: You'd have one hell of a hangover.
- Monika: *I think that would be classified...*
- Specialist: Then we must all be alcoholics...
- Monika: *Maybe we are all... (laughs). Okay.*
- Specialist: We all sit in the bars...
- Monika: *So that's were the problem started with all you military guys, hey?*
- Specialist: We didn't all become alcoholics.
- Monika: *There's one piece of history, which has been proven, that social aspects play a large role in heroin dependence. There is also a physical dependence. If you look at the Vietnam War, there were American soldiers placed in Vietnam, which we all know, and a lot of them got addicted to heroin and other opiates.*
- Specialist: Yes.
- Monika: *Um, because... to block off the trauma and horrors of war. When they came back to America, they stopped using. It wasn't... it wasn't... there was a small percentage that continued using, but the majority of them immediately stopped.*
- Specialist: But it comes down to removal out of your environment.
- Monika: Yes.
- Specialist: And they received help.
- Monika: *Yes, but it says something about the social context. Because if the person, if it was purely just... use everyday for six weeks, or whatever, and now, surely I'm a heroin addict, now I'm back in America, and I'm no longer an addict.*
- Specialist: Ja (yes).

- Monika: *Do you know what I'm trying to say by that. So that's that one piece in history that totally questioned a lot of the other theories about the nature of heroin dependence. It says a lot about the physiological component...*
- Specialist: I think that those two factors...
- Monika: *The psychological and physical dependence...*
- Specialist: And I think the physiological one is the reason why the person returns (to heroin). So if you can fix a guys head and keep him clean for 18 months.
- Monika: *I think initially it can be physiological, but I don't think in the long term. We don't know... there could be neurological symptoms that take much longer...*
- Specialist: The first 18 months, if you can control the physical symptoms, with Subutex and Suboxone, or whatever, and keep his head right for 12 months, then you've won the battle. I think so.
- Monika: *But there are cases, and which we see with any substance dependence, you can be clean for ten years, sober for ten years, and you relapse, start again, and you where you were and you progress.*
- Specialist: Yes.
- Monika: *Now is that physiological or psychological?*
- Specialist: That's why I say it's both.
- Monika: *I would imagine that the physiological is relatively easier to fix? Can I tell you why?*
- Specialist: I think, I agree with you 100%.
- Monika: *If it was purely physiological it would be much easier.*
- Specialist: It might be a psychological thing to start off with, now why would you go and stick a needle in your arm to start off with?
- Monika: *Well, what some of the research has indicated is that it's actually an addiction to needles, where addicts... and that's part of also if you look at needle exchange, where a lot of addicts get addicted to the needle, the whole ritual, the shooting up, classical conditioning, operant conditioning. They're known to shoot up anything, water - also Subutex, you know, where they've mainlined Subutex too, but it's not necessarily Subutex or whatever, that's making them high.*
- Specialist: I've only had one that's injected Subutex.

PARTICIPANT 10

Monika: What intervention strategies, both psychosocial and pharmacological, are in your opinion the most effective in treating heroin use disorders?

Specialist: If you say psychosocial you mean psychological?

Monika: Psychological.

Specialist: Okay. Okay... I think, to treat a patient, or most patients that I've encountered in my practice over 23 years, is to have them admitted in a structured environment like a clinic or hospital. Then I think the first step in the whole therapeutic process is to find out what is his support system. Or I did find, or what my opinion is, on this matter, and out of my experience, is that usually the problem lies within the family. I'd say ninety-nine percent of the people I've seen in my practice are people who've got family problems, mostly within the family, but sometimes also out of the family like with a relationship with a boyfriend or girlfriend that went sour, and then the person cannot cope, because either he does not have the necessary support, or he hasn't got the adequate social skills to cope with hurt and pain and his own depression, and then he takes drugs as a way to alleviate the pain and suffering.

Monika: As a symptom?

Specialist: As a symptom, ja (yes), but it's very important that the patient or person will be treated with the knowledge and support of his family, or people close to him, whether it's his wife or children, or depends on his age, but I think the younger the person; the more important the family is in treating the patient.

Monika: The younger the person?

Specialist: The younger the person.

Monika: Could you elaborate?

Specialist: Yes, because young people are emotionally and financially dependent on their parents, while people in their 20s and 30s are more independent, and then you also need to get the support of the employer or the firm or the factory that he works in, in other words, you have to go to the personnel management and try and get their support because most people who work spend half, or three-quarter or a quarter of their lives at their work, and sometimes people use drugs because they have a very unsatisfactory working environment, either they clash with the boss, or a colleague, and then they haven't got the interpersonal skills and, or they do not actualise themselves within their working environment, or they get bored or frustrated or both, because they haven't got the ability to verbalise their feelings, and to discuss the matter, or to tackle the matter in a more normal way, they turn to drugs, and they escape from the work situation. You also get drug abuse amongst people who are highly skilled - like medical doctors, and they get treated to treat patients... like dentists and like surgeons, but they never get any form of training on how to cope with... say for example, if they loose... if their patients' die or they cannot cope with the patient, they do not have the skills.

Monika: Pethidine misuse?

Specialist: Yes, pethidine which is especially prevalent amongst medical doctors.

Monika: And nurses?

Specialist: And nurses, yes.

Monika: Any thoughts on co-morbidity and treatment?

Specialist: Co-morbidity usually is depression, and anti-social, but mostly depression.

Monika: Thoughts on treatment period, and out-patient versus in-patient treatment?

Specialist: Inpatient I'd say, people or the places I've worked at or with, usually talk about a month, or twenty-one days like Vista, but I do think the inpatient period should be longer because I think after one day you dried up or you clean from the drugs, it's out of you blood, in a way you... but in a way of thinking, your mind set hasn't changed. Because the first few days you suffer from withdrawal symptoms, and then when you actually get out of this terrible nightmare experience, after ten days you start seeing reality a little bit, and then you have to adapt to strange people, in a strange very restricted small setting, and then you tend to start missing your family and your friends, your support group, and that's why I start off by saying that support group, either peer group, family or employer is very important in the whole treatment process. Because after 10 days when you sort of out of the withdrawal period, then people should start working on your way of seeing life, your whole perception of being, and your place in the world, your place... you know where do you fit in, and where did things go wrong.

Monika: *And identity?*

Specialist: Ja (*yes*), and then you must make a diagnosis, it's very important at that stage to see what it or was the co-morbid situation, was it depression, divorce and depression, or something go wrong at work, or was the person sexually abused, or whatever the case might be, and to try to rectify that - and that's why you going to need more than and a month. I do not say that this period... I mean, the patient can go out for a day or two, but he must come back, and it's better to keep him like in a protected environment, because it's so easy to relapse, because here you've here for twenty-one days, or like in a rehab centre, and everything goes well because it's easy not to use drugs because you cannot use drugs actually, but if you go out, because it's not like a halfway house, where you gradually get exposed to the normal stressors, like they do at mental institutions.

Monika: *Is that a shortcoming?*

Specialist: It's a big shortcoming, you should have halfway houses, like the mental hospitals, the guy goes to work and he comes back at night, and at night he's got the support from his therapist, his psychiatrist, or whoever might be on this team, and he discusses the problems that he may have encountered during the day, and gradually, but very gradually, you reintroduce him to society as such, because it's difficult if you've lived in a place, in a low stress environment like a clinic, and then go back to society, because the biggest problem then is the stigma that's attached, you get labelled, you a druggie, you're an alcoholic, and it's difficult because people do label you, people don't trust you, and then the others will treat you too nice, they treat you too special, and then you start feeling different, and then you're likely to relapse, because they make you feel... they want to make you feel welcome, but they overdo it, and by overdoing it you feel unwelcome, you feel you're not welcome, and you feel different, you feel out of place, and obviously also anxiety plays a big, big role in drug abuse. I think many people do take drugs either because they cannot cope with anxiety and/or depression, and anxiety goes hand in hand with low self-esteem, low self-confidence, and sometimes people are not so clever, whose IQ levels are not that high. They find it difficult to cope in our society, and because they do not make it financially, and because I think we live in such a capitalist sick society, that if you don't make it money wise, people don't acknowledge you, that's why you also get drug abuse amongst artists.

Monika: *Who often suffer from bi-polar disorder?*

Specialist: Bipolar (*disorder*) also increases the likelihood of drug abuse, because depression... the manic phase not a problem - because then they spend, and they have sex, and they feel happy and on top of the world, but as soon as they hit the low, then drug abuse is quite prevalent.

Monika: *Do you have a preference for any specific psychotherapeutic intervention?*

Specialist: No, I think in the beginning, the role of the therapist or psychologist or whatever, it to be very supportive, and I think you should get the message across to the patient that he hasn't done something wrong because guilt also plays a big role in the whole healing process, guilt is a thing that has to be addressed because you get rejected by society if you abuse alcohol or drugs, and then you start feeling guilty, because you've let down your parents, you've let down your friends, you've let down your wife, or your girlfriend or whatever the case may be. Guilt plays a very important role, because if the guy cannot cope with his feelings of guilt, the chance of relapsing is very high, and I think that after this, or especially during the withdrawal period, or shortly after that, mmm, I think also that the therapist should be a little bit on the background, and just be very supportive. I think if the guy is clean, and he's over the withdrawal period, and when he starts seeing that he's not psychologically dependent, where in his mind, his mind set, his subjective feeling is that he cannot come without drugs, I think then the therapist should change his whole therapeutic strategy to one of Cognitive Behavioural Therapy. I mean the guy... to actually teach the guy to think differently about things, and to find out what is his values in life, and I think, at that stage a very therapeutic relationship, the patients' religion also plays a very important role, or whatever he might believe in, not necessarily religion as such.

Monika: *Spirituality?*

Specialist: But his spiritual life, his spirituality.

Monika: *In what sense?*

Specialist: No, well I mean your spirituality is that aspect of your life that makes sense out of everything, and if you don't believe in something you cannot believe in yourself.

Monika: *And it can be a source of hope?*

Specialist: Yes, it will be a source of hope.

Monika: *Are you familiar with the maturing out hypothesis of heroin dependence?*

Specialist: I know a little bit, the hypothesis?

- Monika: *Which is not what you see with alcoholism for example.*
- Specialist: Yes, look I think, the one thing that I think in any therapy is to get a guy to lead a normal life, as far as possible, especially concerning his eating habits, his interpersonal contact with other people, his interpersonal contact with groups, with institutions, like education, like his church or whatever he might believe in, and then extramural activities like karate, like sport. To really get him back in the community, back to normal life, and I think that means... the guy cannot, because he functions such on a certain level, and that was not adequate enough to keep him away from drugs, and now he's still taking drugs, he does not cope in society anymore, the guys rejected, he loses his job, and then he ends up in a clinic, it's actually like weaning a baby again. You have to start all over again from the beginning.
- Monika: *Do the social circumstances play a big role?*
- Specialist: A very important role.
- Monika: *If you look at the Vietnam War, it was one case in history that supports the availability... if you look at... a lot of the Vietnam veterans used heroin in Vietnam in order to block the horrors of war, and when they went back to America, only about 7% I think continued with a heroin dependence.*
- Specialist: Yes, because in America... almost compare to South Africa now lately... when the guys came back from Vietnam there was a certain group of people, a certain population in the United States, that regarded, especially the older generation, they regarded these guys as heroes.
- Monika: *Mmm.*
- Specialist: Then there was this younger generation, especially the guys who stayed at home, who didn't have to go to Vietnam, and they started rebelling against this whole Vietnam... America's involvement in the east.
- Monika: *Mmm.*
- Specialist: So when these guys came back they were in a very difficult situation because on the one side there was their peer group, or members of their peer group who rejected them, and didn't want to mingle with them, and you had at the other side the older generation that accepted them and thought they were heroes.
- Monika: *Although there were a lot of atrocities...*
- Specialist: Yes.
- Monika: *Such as at MyLai.*
- Specialist: I'd say the biggest problem is that the people they sent over to fight the war were too young, an average of 18 years, from 16 years. Between 16 and 21/22.
- Monika: *I think the Vietnam War scenario in terms of heroin dependence; it actually goes against the sort of normal view of heroin dependence as chronic, and you know, not curable.*
- Specialist: Yes, because I think the younger generation are regarded as criminals, and that is why some of them turn to crime, they were exposed to criminal experiences in Vietnam, so they came back as criminals, in the United States, many of them started stealing cars, abusing alcohol or drugs which also... some of them started abusing alcohol and drugs in Vietnam already, they just continued when they got back to the States, because they couldn't find their way.
- Monika: *The majority did stop?*
- Specialist: Ja (yes), the majority did stop, there was a small minority group that just didn't cope.
- Monika: *They were diagnosed with post-trauma.*
- Specialist: Ja (yes), but at that stage PTSD was really only coined in the 90's. I mean, they talked about the Vietnam Syndrome, but they didn't really know what was going on, they didn't know.
- Monika: *They were later diagnosed with PTSD.*
- Specialist: Ja (yes), but they didn't really know how to treat it, and they didn't know much about it, and they didn't know that it can be a long-term disease or syndrome. They also didn't know that especially guys who functioned well in Vietnam, in the war situation, when they got back they started suffering from PTSD. They thought, bring the guys back to normal society and he will heal and get better, and that's not true. What they've proved in South Africa - to treat the guy in the war zone, you get better results than treating him under normal circumstances. Ja (yes), because if you get removed from the war zone, all your mates and friends and fellow soldiers think you're a coward, they think you using it as an excuse, because I mean, because both post

traumatic stress and depression are not necessarily visible diseases, or visible syndromes. That's why in South Africa, at the end of the war, they started treating people at the border and then send them home. Send them to I Mil (*I Military Hospital*), they treat them there, or Oshikati, the sick bay there, they treat the patients there. Intensive therapy, and they actually try to send them back as well, to ambush, not ambush, combat, so they can prove themselves to themselves, because if you send a guy to I Mil at that stage, before 1994, people were regarded as heroes in South Africa. If you were on the border and you walk into the kaffie (*green grocer*), the Greek will give you a coke and a hamburger for free.

Monika: *Mmm.*

Specialist: So now he invites you, you never had contact with him for 18 years, you grew up next to him, but after being to the army or the border for two years, when you get home you get treated like a hero. You get invited to his house, and he wants you to take out his daughters and he wants you to go watch rugby with him, and you must tell him about how you killed the black people, because that's what he wants to hear. But after 1994, that's why I say there are similarities between America and South Africa, after '94 - the same is going to happen with Iraq, the guys fighting there - the same story is going to happen there when they come back home. Now people, where people used to talk about it in pubs, about where they've been in the army, and what they do, and which camps they were placed in, where... they sent us into Angola, and which towns we invaded, how many people we killed there, people don't talk about it anymore, you're actually shy. You actually not proud to say you've been involved in National Service, in the army and you've done National Service, but I mean then you had no option, either two years spent in the army, or you go four years to prison.

Monika: *Mmm.*

Specialist: Four years - they sent the guys four years to jail, sometimes longer if you refuse to do your national service, and I mean they were strict, they came to the schools.

Monika: *Mmm, I remember those days.*

Specialist: You couldn't dodge, like in America, the guys they moved from one state to another, so they couldn't trace them, and after Vietnam they just moved back.

Monika: *Any thoughts on harm reduction approaches?*

Specialist: What?

Monika: *Harm reduction, as an intervention mode, such as the needle exchange programmes, and then you get your pharmacological maintenance, or your opiate substitutes...*

Specialist: No, think that's very important. I mean, they spend so many hours during... the students, or pupils, time at school, they don't teach the children about drugs, they're not educated.

Monika: *Is that not more prevention?*

Specialist: Ja (yes), it's prevention, but I mean, okay, say people who's addicted... no, I think programmes of needle exchange is very important. People become aware as most people don't know, most of the girls and the people I see, they don't actually know what the dangers are.

Monika: *In what... because it's quite controversial policy, I mean, it hasn't been implemented in South Africa.*

Specialist: No, it's implemented in places like Holland, where you can go to a clinic and get free needles. It's very important I think because if you're addicted you're addicted.

Monika: *Well, it's also about the AIDS epidemic...*

Specialist: AIDS... well it's like a guy who stutters, you cannot tell him stop stuttering, he must go to the speech therapist; he must go see a physician, so they tell him what is wrong, with his voice or whatever, is it a mental problem or a physiological problem. Now the same for people who are addicted, I mean, addiction is like something you cannot stop voluntarily.

Monika: *It's chronic?*

Specialist: It is a chronic situation, it's like suffering from PTSD, you cannot tell a guy to stop having nightmares, you've got no control over it - in his subconscious mind it's there, and drug abuse as well, I think it changes your way of thinking, because the first thing is if you're addicted to anything, you only mix with a very small minute group of people, and all those people are so far away and into the drugs, they don't care about you, they don't care because they don't know. I don't think their minds is functioning such that they would be concerned, and if people who addicted would go so far as to sell their bodies, and they have unprotected sex, I mean, then why would they bother about needles? And most, now I know that you specialise in heroin, but most of the people I come across or met or treated or tried to treat as patients, or helped to treat

them as patients, they didn't care - there's no value system, everything is collapsed. I'm talking about in Pretoria who would go to Sunnyside, and they have sex with whatever nationality, whether it's black or white or Chinese, they didn't bother, and they were willing to be... live with Zimbabweans, they were willing to sell themselves to get money and a drug for a fix. So if a person's gone so far down that road, I mean, what does needles mean? They don't care.

Monika: *Some people feel that it's sending mixed messages.*

Specialist: But I do think, and it's only my opinion, I do think that government should have fixed places where the people go and feel free to get a needle from a chemist that is sponsored by government for free. I think it helps with the spreading of AIDS, to a great extent. I think like in Europe you find a special... almost like safe place you can go to, it's for free, and it's like a safety house that you go to and you, it's actually an escape from your fellow addicts, and you can stay there and eat there, and you can become clean, but you can also further on do drug abuse there, still go on using drugs, it's a very controversial thing, I know.

Monika: *Like heroin maintenance?*

Specialist: Yes, like heroin (*maintenance*)... but I mean, anyone who has any knowledge about heroin, or who has dealt with heroin patients, will know that it is hell to stop.

Monika: *But it's not fatal?*

Specialist: No, it's not fatal.

Monika: *Alcohol withdrawal can be fatal though.*

Specialist: Yes, you can die from alcohol withdrawal, but what I mean that's very dangerous about heroin, I mean, well I'm talking about what my patients have told me, is that after being clean for six months or years, you just wake up or they will walk in the street and they just get this desire. It's actually, they cannot resist the temptation, to such an extent some of these young girls, that they phone me 3 o'clock in the morning... 'can we go to Vista, I'm going out of my mind and I'm going to loose it', or 'I'm going to go to Sunnyside, walk down the road to get a fix', that's the problem.

Monika: *Do you feel then that methadone maintenance or buprenorphine has a role to play?*

Specialist: Yes, I think it's the same with alcohol, you will, I think with alcohol and heroin there are a lot of similarities...

Monika: *Apart from the maturing out hypothesis.*

Specialist: You can mature out of it, but, you will always, once you are alcoholic, you will remain an alcoholic for the rest of your life, the only thing that is going to change is that you'll be able to say that I'm a rehabilitated alcoholic, but the alcoholic will stay, you cannot change your status because it's there in your mind, it's in your way of perceiving the world, and that is the way of coping in alcoholics. It's the same story, it's a way of coping for certain people, and that coping mechanism is stored in your memory, stored in your brain, and if the stressors get high, you will maybe not resort to abusing alcohol again, but you will think about it, he will think about it for sure. A guy can be dry for ten years, and he'll get flashbacks although he's been dry for ten years, relapse even after ten years, because that is your way of coping. It's something you have taught yourself, or you have taught yourself, or you've been taught by your friends or peer group or whatever. But it's in your mind; it's in your memory, in your subconscious mind you will always think about it, as a way of resolving problems, because if you abuse alcohol you feel far away from things, you're not so closely connected with yourself and/or other people and or with your problems. So it's one way of coping, some guys drive fast with their cars, some guys hit their wives, some turn to religion. There are so many ways of coping with life, but once you've gone down that road of abusing alcohol as a way of escaping or resolving your problems, it's in your way of perceiving the world and life, so you'll never be able to say I'm not an alcoholic, you'll say I'm a rehabilitated alcoholic, or a recovered alcohol.

Monika: *But you do find exceptions who do make radical changes.*

Specialists: I think a very small percentage, that either they turn to religion, or they get married and have children and change their whole way of existence, I mean they do radical changes.

Monika: *Life-style changes.*

Specialist: I don't say radical changes, but he just stops drinking, goes on with his life, with the same friends, the same relationships, and those thoughts will always be there, some ways of coping will always be with him, until I promise you, until he dies oneday.

Monika: *I agree with you, I think for a large percent.*

Specialist: And that's the same with heroin.

- Monika:* However, 30's/40's, burnout, and heroin may also have different pharmacological effect over time, as opposed to alcohol - which is not one of the theories behind the maturing out hypothesis. It's a lot of work to 'mission' for drugs.
- Specialist:* But I also think that they acknowledge to a great extent, that when you get older there are also hormonal changes in your whole body which changes, and your way of thinking... because although your brain is not that brilliant anymore, your life experience is so much more greater. As you get older you're not so concerned about small things anymore. If you've made it in your career and you've made it money wise, you're not so serious about small things anymore, and then you realise... I think you have more insight the older you get. I think a guy after the age of fifty, if he get's addicted to something; I think the prognosis is very poor.
- Monika:* It's not very common...
- Specialist:* No, it's not, you don't find it much, that's why I say, age.
- Monika:* Well, they've also seen research indicators that the younger you start, the more chronic the addiction is.
- Specialist:* I've read the other day; alcohol is very prevalent now amongst school children, they want to institute tests, alcohol tests, at schools. They arrive at school, if they drink at school... I'm sure more in the black community, white schools are still small. I mean, you're sitting 30 pupils in a class in the white schools. In the black schools... I know all schools are mixed, but you find ten times the amount, especially in townships. With so many pupils in a class, I mean, how are you going to know on that level, you will not pick it up easily.
- Monika:* Have you heard of a substance called apomorphine?
- Specialist:* Yes, I watched a TV programme the other night.
- Monika:* What did they say about it?
- Specialist:* Is it like LSD?
- Monika:* No.
- Specialist:* Not?
- Monika:* Apomorphine is not a hallucinogen and it is not addictive. It's actually used medicinally for Parkinson's disease and erectile dysfunction. However, it has been used in the past in the treatment of chronic heroin dependence, albeit controversially. I thank you for your time, consideration and input.