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The supply of needles and syringes to injecting drug users : Attitudes and practices of pharmacists in Western Australia

Heather June Newbey
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**THE SUPPLY OF NEEDLES AND SYRINGES TO
INJECTING DRUG USERS: ATTITUDES AND
PRACTICES OF PHARMACISTS IN
WESTERN AUSTRALIA**

Heather June Newbey

Thesis submitted in Partial Fulfilment of the Requirements for the

Award of

BACHELOR OF SOCIAL SCIENCE (HUMAN SERVICES)

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Faculty of Health and Human Sciences

Edith Cowan University

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USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

ABSTRACT

Since 1986 in Western Australia many pharmacists have been supplying needles and syringes to injecting drug users as part of the governments's harm minimisation policy to prevent the spread of HIV/AIDS and other blood-borne viruses, particularly the more recently recognised hepatitis C. This practice was technically illegal, although officially condoned, until May 1994. Adequate baseline data not was available concerning needle and syringe supply or the attitudes of pharmacists concerning this issue. In this study a mail survey of Western Australian community pharmacists was conducted to determine the proportion of pharmacists currently supplying needles and syringes to injecting drug users, the factors that have influenced supply practice over time and the factors differentiating between current sellers and nonsellers. A stratified random sample of 130 pharmacists was selected from the population of 466 metropolitan and country pharmacists. Prior to the mail-out pharmacists were telephoned to inform them of the study, ask them to participate and ascertain their supply practice, after which questionnaires were posted to consenting pharmacists. Two follow-up calls were made to non-respondents. From 129 forwarded 115 useable questionnaires were returned comprising 74 from the city and 41 from the country, a response rate of 88%. The results found that 88% of pharmacists were currently supplying needles and syringes to injecting drug users, 86% of metropolitan and 90% of country pharmacists. Eight percent of pharmacists were past sellers and 4% had never sold. The commonest factors rated by current

sellers as important in their decision to supply needles and syringes was the belief that it was essential to the reduction of the transmission of disease (92%) and belief that disruption was unlikely to occur (78%). Disruption in their pharmacy (89%) and threatening incidents (78%) were the main reasons past sellers ceased supply. The major differentiating factor concerning supply practice was that nonsellers were more likely than sellers to have experienced disruptive incidents in their pharmacy, $t(113) = -.37$ $p < .01$. The findings indicate that the vast majority of pharmacists currently supply needles and syringes and were not unduly influenced by the former legal sanctions. There are some implications for support and/or training for pharmacists in relation to needle and syringe supply.

DECLARATION

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously published or written except where due reference is made in the text.

Signature.....

Date.....19.6.1995.....

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DEDICATION

To my Dad, who died before I had finished.

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CHAPTER ONE

Introduction

Since 1987 pharmacists in Western Australia have been encouraged to sell needles and syringes to injecting drug users as part of the government's harm minimisation strategy for the prevention of the spread of the human immunodeficiency virus (HIV), the organism that causes the auto immune deficiency syndrome (AIDS) (Loxley et al., 1990). With the more recent identification of another serious blood-borne virus, hepatitis C, and its rapid spread among the injecting drug using population, it has become more imperative that preventive measures such as the sale of sterile injecting equipment by pharmacists "be implemented with greater consistency and coverage" (Wodak & Crofts, 1993, p. 18).

By early 1994 the majority of pharmacies across the state (approximately 78%) were selling needles and syringes to injecting drug users (Kerry, 1994). While this could be regarded as a positive response to the government's initiatives there were still a significant minority who did not supply. It was known that some non-selling pharmacists had never adopted this controversial practice, while others, having undertaken it, had reversed their decision to sell (Greig, 1992). There was

however, no good baseline data available concerning the factors that affected supply practices nor of the attitudes of pharmacists in relation to this issue. Neither was there any data available concerning the proportion of metropolitan and country pharmacists supplying needles and syringes to injecting drug users in Western Australia.

While the supply of injecting equipment to illicit drug users was condoned for public health reasons in Western Australia, it was technically illegal under section 36 of the Poisons Act 1964 - Aiding and Abetting Drug Offences and section 6 (2) of the Misuse of Drugs Act 1981 - to incite or conspire with another to commit an offence (Kerry, 1994). It was within this context that this research was planned with the question in mind of how the legal situation influenced pharmacists' supply practices. At that time however, the Poisons Amendment Bill 1993 was expected to proceed to the third reading in the Legislative Assembly of the Western Australian Parliament in March 1994, after which it was anticipated the Act would be proclaimed, legalising the provision of needles and syringes in Western Australia under certain conditions (Kerry, 1994). There was no certainty that the Bill would be passed as it had been rejected a number of times previously. However, the outcome of the Parliamentary deliberations was that the Bill was assented to on 15 April, 1994 by both houses of the Western Australian State Government as the Poisons Amendment Act 1994 (amending the Poisons Act 1964 and the Misuse of Drugs Act 1981) (Poisons Amendment Act, 1994) and proclaimed on May 24, 1994 (Proclamations, 1994). This meant that by the

time data was collected for this study it was legal, with the approval of the Commissioner of Health, to supply needles and syringes to injecting drug users. Consequently the timing of this study is important because it was conducted just after the legislation change and could determine whether the previous legal situation, in the context of the lack of enforcement, had impacted on supply practices and offer some insight into whether the change in legislation would make a difference in the future.

The Purpose of the Study

This study was conducted to determine the attitudes and practices of Western Australian pharmacists regarding the supply of needles and syringes to injecting drug users. The study was designed to establish the proportion of metropolitan and country pharmacists currently supplying needles and syringes to injecting drug users, the factors influencing current supply practices and factors that have influenced supply practices over time. The type of information sought included pharmacists' perceptions of the seriousness of HIV and hepatitis C as a public health concern; their thoughts on the supply of needles and syringes to injecting drug users; the policy and practice in their pharmacy regarding the sale of needles and syringes and the factors influencing past, present and possible future supply practices; and whether problems or difficulties had been encountered in their pharmacy involving illicit drug users. Other information sought pertained to the dispensing of methadone, pharmacists' understanding of the legal status of supplying needles and syringes to injecting drug users and the influence this had

on supply practices, attitudes to injecting drug use and injecting drug users and demographic details.

The Significance of the Study

This research is significant because it is the first comprehensive study to be conducted in Western Australia to determine pharmacists' attitudes and practices to the supply of needles and syringes to injecting drug users. The one small unpublished study that surveyed pharmacists in relation to this issue was an evaluation of the pharmacy 'Fitpack' program (Greig, 1992). Greig's (1992) research, however, did not address the issue of the locality of pharmacists or their attitudes to the provision of needles and syringes to injecting drug users. The results of the current study redresses a gap in knowledge and provides good baseline data that could have implications for policy and practice in regard to the future supply of needles and syringes as well as other health initiatives.

A further significant feature of the study is that there has been no previous research conducted which focuses on the beliefs and attitudes of pharmacists in relation to hepatitis C, although several studies of a similar nature in other states have concentrated on HIV (Cuatt, 1989; Jennings, 1987; Tsai, Goh, Webeck & Mullins, 1987). Considering this, Western Australian pharmacists' perceptions of the seriousness of hepatitis C is an important aspect of this study. The findings should give some indication of the extent to which hepatitis C is understood and will be of interest to health professionals and policy-makers alike.

Some pharmacists experience problems and/or difficulties in conducting their business with regard to the sale of needles and syringes to injecting drug users (Greig, 1992; Monash Medical School, 1987). An important element of this research is determining the extent to which pharmacists are experiencing problems and difficulties and how they are handling incidents, and identifying areas of concern. Highlighting these factors may offer some insight into the need for support and/or training for pharmacists.

By supplying needles and syringes to injecting drug users pharmacists are providing a valuable service in the interest of public health. According to Lenton (1994) however, in the view of some pharmacists:

there was little public acknowledgement of the work [they] have undertaken, largely out of goodwill, in minimising the impact of HIV and other blood-borne diseases on the community through participation in the scheme to provide [needles and syringes] to [injecting drug users]. (p. 3)

Therefore this research is significant for pharmacists who feel they have never really been recognised for the service they are providing. Participation in this project provides the opportunity for them to express their views and recount their experiences in a formal manner, thus contributing valuable information to help identify key variables that could impact on policy or procedure that personally affects them.

Research Questions

This study endeavours to answer three broad questions:

1. To what extent do pharmacists currently supply needles and syringes to injecting drug users?
2. What are the factors that have influenced changes in the supply practices of pharmacists?
3. What are the factors that differentiate between pharmacists who currently supply of needles and syringes to injecting drug users and those who do not supply?

Definition of Terms

Injecting drug users In this study the term "injecting drug users" refers to persons who inject drugs illicitly. It does not include persons injecting drugs for legitimate health reasons, for example diabetics, unless specifically stated.

Harm minimisation The National Drug Strategy Committee (1993) describes harm minimisation as:

an approach that aims to reduce the adverse health, social and economic consequences of alcohol and other drugs by minimising or limiting the harms and hazards of drug use for both the community and the individual without necessarily eliminating use. (p. 4)

The term 'harm minimisation' refers to the broad policy or approach and is defined by Strang (1993?) as "the overall goal or endpoint to be aimed for" (p. 7).

Harm reduction Harm reduction refers to the programmes and strategies implemented to achieve the goals of harm minimisation (Strang, 1993?). For example, supplying needles and syringes to injecting drug users is a harm reduction strategy. Other strategies pertinent to the prevention of blood-borne disease include educating injecting drug users of the potential danger of their activities and ways to minimise their risk, and methadone programmes for opiate dependent users.

Fitpack A Fitpack is a black plastic pack which holds five needles and syringes providing a safe and convenient method of storing and carrying, first sterile, then used needles which may be locked securely in place and the Fitpack safely disposed of.

Current Sellers Current sellers are pharmacists who were selling needles and syringes to injecting drug users at the time data was collected for this survey.

Past sellers Past sellers are pharmacists who had previously sold needles and syringes to injecting drug users and no longer do so.

Never Sold The term 'never sold' refers to pharmacists who have never sold needles and syringes to injecting drug users.

Nonsellers Nonsellers are pharmacists who do not currently sell needles and syringes to injecting drug users. They include past sellers and pharmacists who have never sold.

Limitations of the Study

The timing of this study may be a limitation because it was conducted so soon after the legislative change that removed the sanctions regarding the provision of needles and syringes to injecting drug users. Some pharmacists were reacting to having to apply for approval and may have been in a state of uncertainty about their legal position (K. Kerry, personal communication, October 1994) which may have affected some of the responses received. Although it was known at the planning stage that the change was highly probable it was hoped that the study could have been conducted prior to the event or some months after. However, the timing of the change and time constraints of the study prevented this.

As the total population of pharmacists was not surveyed a further limitation of the study is that there is no way of knowing whether the sample selected was representative of all pharmacists in Western Australia, thereby enabling accurate generalisation. However, the random sampling technique and the high response rate would indicate that this is not a serious limitation (de Vaus, 1991).

Self-report bias may also be a limitation. As de Vaus (1991) points out "responses to sensitive or controversial questions can be affected by social desirability

considerations: giving acceptable rather than true opinions" (p. 110). However, according to Dillman (1978), of all self report type surveys mail surveys have the least probability for socially desirable answers.

CHAPTER TWO

Review of Related Literature

This review presents the background to the harm reduction strategy to supply needles and syringes to injecting drug users, the Western Australian experience and a review of previous Australian studies relating to pharmacists' supply of needles and syringes. Firstly, an overview of the blood-borne diseases HIV/AIDs and hepatitis C is presented, followed by a discussion on injecting drug use. Government policy in response to these diseases is described explaining harm minimisation and harm reduction strategies, and more particularly the provision of sterile injecting equipment to injecting drug users. The Western Australian experience is discussed particularly in relation to pharmacists' role in needle and syringe supply, and in the legal situation concerning supply. Deterrence theory, which may be an influence on pharmacists' supply practices is also discussed. This is followed by a discussion on attitudes to injecting drug users. The chapter concludes with a review of previous Australian studies concerning pharmacists supply of needle and syringes to injecting drug users.

Blood-borne Disease

AIDS

Since the first cases of AIDS in the western world were diagnosed in the United States in 1981 a world wide health crisis has evolved due to the epidemic spread of the disease, the phenomenon now being classed as a "global pandemic" (National HIV/AIDS Strategy: 1993-94 to 1995-96, 1993, p. 5). The first identified cases of AIDS were among men who have sex with men, believed to have been transmitted through anal sex, with the first wave of the epidemic spreading rapidly through the male homosexual/bisexual population in many developed countries of the world (Department of Community Services and Health, 1989).

Early in the epidemic it was recognised that injecting drug users were also contracting HIV through sharing contaminated injecting equipment (Schuster, 1992). A second wave epidemic among the injecting drug using population swept through many countries including America, Europe and Asia (Des Jarlais, 1992; Darke, 1992; Wodak, Crofts & Fisher, 1993). The experience of cities such as New York (Des Jarlais & Friedman, 1990), Edinburgh (Robertson, 1990), Milan (Tempesta & Gianntonio, 1990) and Manipur (Naik et al., 1991), with HIV seroprevalence rates among injecting drug users increasing to over 50% in the space of a few years, well illustrates the rapidity with which HIV can spread once established within a population of drug injectors. Des Jarlais (1992) contends that "a lack of AIDS awareness" among drug injectors and "mechanisms for efficient

mixing of the at-risk population" appear to be the most frequently identified factors in the rapid spread of HIV (p. 347).

Because AIDS was first identified in the developed world among men who have sex with men and among injecting drug users, it was initially assumed that transmission was associated with male to male sex and with unsafe injecting practices (National HIV/AIDS Strategy: 1993-94 to 1995-96, 1993). However, subsequent discovery of extensive heterosexual transmission of HIV in Africa changed this perspective and in recent years in the United States the proportion of AIDS cases due to heterosexual contact has risen sharply (National HIV/AIDS Strategy: 1993-94 to 1995-96, 1993).

In the western world injecting drug users are the "major conduit for the dissemination of HIV infection to the general community" (Wodak, 1990, p. 22) by transmission from infected persons to their sexual partners, and perinatally from mother to child (Kaldor, Elford, Wodak, Crofts and Kidd, 1993). This is well illustrated in New York City where, by 1988, injecting drug users were the source of infection in over 90% of heterosexual and over 80% of maternal-infant cases of AIDS (cited in Wodak, Crofts & Fisher, 1993). As Wodak (1990) points out:

The control of HIV infection in the third wave of the AIDS epidemic - i.e. in the non-drug using heterosexual community - will depend, in most western countries, on the success or failure of efforts to control the second wave of the epidemic - i.e. the spread of HIV in injecting drug users. (p. 22)

Prevalence of HIV/AIDS in Australia.

From the time AIDS was first recognised in Australia in 1982 (Wodak, 1992) until June 30, 1994 according to figures from the Australian HIV Surveillance Report (National Centre in Epidemiology and Clinical Research, 1994a), a cumulative total of 18,274 diagnosed cases of HIV infection were officially reported. Of these 4,882 had developed into AIDS. Eighty one percent of cases were reported to have been contracted through male homosexual/bisexual contact, 5.2% through injecting drug use, and a further 2.9% of cases were among homosexual/bisexual males who also injected drugs. Over the years an increasing number of heterosexuals have contracted the virus with only 1.3% of total cases reported up to 1985 compared with 14.2% during 1993 (National Centre in Epidemiology and Clinical Research, 1994b). The proportion of reported cases associated with injecting drug use in 1993 was 4.7%.

New South Wales, the state in which HIV/AIDS was first diagnosed (Wodak, 1992), has the highest prevalence of HIV/AIDS with 63% of cumulative cases reported to December 31, 1993 (National Centre in Epidemiology and Clinical Research, 1994b). This figure reflects the fact noted by Tsai, Goh, Webeck and Mullins (1988) that while New South Wales has approximately one third of the Australian population it has an estimated 50% of the total intravenous heroin users in Australia. Another factor in the high proportion of HIV in New South Wales is the substantial homosexual community in the state, particularly in Sydney, which has an identifiable gay district in the inner city (Wodak, 1992).

Following New South Wales, Victoria with approximately one quarter of the Australian population (Castles, 1993) has 19% of cumulative cases of HIV, Queensland with 17% of the population has 9% of cumulative HIV cases and Western Australia with one tenth of the population has 4% of cumulative cases of HIV. The other states and territories have less cases of HIV in proportion to their population.

Prevalence of HIV/AIDS in Western Australia.

Figures from the Epidemiology and Health Statistics Section of the Health Department of Western Australia reveal that since the first cases were recognised in this state in 1983, there have been 823 notifications of HIV until March 1994, 155 of which have developed into AIDS (M. Ashwell, personal communication, March 18, 1994). Of all cumulative HIV cases 73.5% were among homosexual and bisexual men. Another 5.9% were associated with injecting drug use as a single risk factor (4.1% being males and 1.8% females) which increased to 12.1% when men who have sex with men were taken into account. Heterosexual transmission of the virus accounted for 8.8% of cases.

Prevalence of HIV/AIDS among injecting drug users.

As previously mentioned the incidence of HIV/AIDS among drug injectors is over 50% in some overseas cities. In addition to this, Des Jarlais (1992) notes that drug injectors are the largest single group of persons with HIV/AIDS in many cities and countries, including New Jersey and Connecticut in the United States,

Edinburgh in Scotland, Spain, Italy, Thailand and China. In comparison, in a review of twelve Australian studies which measured the prevalence of HIV infection among injecting drug users Kaldor, Elford, Wodak, Crofts, & Kidd (1993) found that HIV seroprevalence among this population has been low, at 0 to 5%. However, among male injecting drug users who also had sex with men HIV prevalence ranged from 20% to 24%. In a Perth study Loxley, Marsh, Hawks, & Quigley (1992) found the prevalence of HIV in a sample of Western Australian injecting drug users was quite low with 2.2% of the participants testing positive for the HIV antibody.

Wodak (1992) claims that while the number of AIDS cases in Australia are relatively low compared to many other parts of the world, possibly due to the initiatives of the government in relation to the prevention of the disease, we cannot become complacent. The National Evaluation Steering Committee (1992) agrees and asserts that:

effort needs to be kept up to maintain adequate levels of safe behaviour in the long term - the epidemic is still young and unstable and the potential for renewed rapid spread still exists. To do otherwise would be hazardous. (p. 9)

Hepatitis C

Another serious blood borne-virus, Hepatitis C which affects the liver, was identified in 1989 (Frankis, 1994) and is also reaching epidemic proportions, particularly among injecting drug users. According to the Australian Gastroenterology Institute (1994) hepatitis C is responsible for at least 95% of

cases of chronic Non-A Non-B hepatitis. More than 50% of individuals exposed to the virus become chronic carriers with at least 25% of cases developing into chronic liver damage, resulting in cirrhosis and in some cases liver cancer.

The most efficient transmission of hepatitis C is by blood to blood contact, and less efficiently sexually (Crofts, et al., 1993., Australian Gastroenterology Institute, 1994). Current information from the Australian Gastroenterology Institute (1994) reveals that in Australia, of patients infected with hepatitis C, about 60% have acquired the infection by sharing contaminated injecting equipment during drug use and another 25% from transfusion of blood or blood products prior to February 1990. However the incidence of sexual transmission from a person with chronic hepatitis C infection appears to be low and much rarer than for HIV and hepatitis B although there are indications that persons with acute hepatitis C may be more likely to transmit the disease sexually.

Prevalence of hepatitis C.

It has been estimated that there are 500 million people infected with hepatitis C around the globe, with estimates in Australia varying between 80,000 and 200,000, according to Frankis (1994). This represents a far greater prevalence of hepatitis C than HIV and Wodak and Crofts (1993) report estimates of at least five times more people infected with hepatitis C in Australia than there are

infected with HIV. Moreover, there are at least 15 times more new infections of hepatitis C each year compared to HIV.

The Australian Gastroenterology Institute (1994, p. 3) reports that among overtly healthy Australian blood donors, the hepatitis C viral carrier rate is 0.2% - 0.4%. However, it is noted that due to the screening of those blood donors at special risk of hepatitis C, prevalence may be higher in the general population. It is however, the injecting drug using population that is most affected by hepatitis C in Australia, with history of past or present injecting drug use being the commonest risk factor for contracting the virus (Kaldor et al, 1992; Wodak & Crofts, 1993). For persons who have ever injected drugs the risk is 70%, increasing to 90% amongst those using drugs intravenously for more than two years at an earlier stage in their lives (Australian Gastroenterology Institute, 1994).

Studies in other developed countries (cited in Crofts et al. 1993) have shown hepatitis C seroprevalence rates among injecting drug users of 50% to 80%. In Australia, a Victorian cohort study conducted by Crofts and his colleagues (Crofts et al., 1993) found that 68% of injecting drug users were infected with hepatitis C, risk being particularly associated with length of injecting. In an earlier study in New South Wales, Bell and his associates had reported an even higher incidence of hepatitis C among a sample of injecting drug users with 86% of subjects testing positive (Bell et al., 1990). In this study it was found that approximately

two thirds of injecting drug users became hepatitis C positive within two years of commencing regular intravenous drug use with 100% seropositivity among persons injecting drugs for more than eight years. As Bell and his associates (Bell et al., 1990) point out, these figures indicate that young people who experiment with illicit drugs are at significant risk of contracting hepatitis C.

Prevalence of hepatitis C in Western Australia.

Estimations have been made that between 10,000 and as many as 30,000 people in Western Australia may be infected with hepatitis C, with present and former injecting drug users, blood product recipients, and migrants who had shared-needle immunisations overseas being the main groups affected (Treweek, 1994). While hepatitis C only became a notifiable disease in March 1993 in Western Australia, a total of 1526 cases were reported by April 20 1994 (Treweek, 1994). Of clients tested in the Perth methadone clinic 85% to 90% tested positive for hepatitis C (Kerry, 1994) indicating that the incidence of hepatitis C in the injecting drug using population in Western Australia is extremely high.

While transmission of hepatitis C is similar to HIV, Hulse, Moore and Lambert (1993) assert that due to the low incidence of HIV in Australian injecting drug users the risk of infection during any single needle sharing incident remains relatively low. Conversely, with the high incidence of hepatitis C among persons injecting for longer than four years, "the likelihood that hepatitis C transmission

and infection will result from a single sharing of injecting equipment is extremely high" (p. 635).

Although the incidence of HIV among people with a history of injecting drug use remains low, it is rising gradually (Kerry, 1994). Furthermore, with the prevalence of hepatitis C within the Western Australian injecting drug using population "alarmingly high" (Donoghoe, 1994, p. 31) it is clear that measures to prevent transmission of these blood-borne diseases should continue to be supported and developed.

Injecting Drug Use

While it is difficult to accurately assess the prevalence of injecting drug use it appears there are an increasing number of injecting drug users in Australia. For example, by extrapolating from the findings of a national household survey conducted in 1986-87 Spooner (1988) estimated that the number of adult injecting drug users at that time was 172,000. More recent figures from the Intergovernmental Committee on AIDS (1992) estimated there were 200,000 injecting drug users in Australia. According to Crofts and Wodak (1993), in 1993 an estimated 200,000 people (representing 2.4% of the adult population) had injected drugs at least once in the previous 12 months. Crofts and Wodak (1993) further report that an exponential increase in the drug related crime rate during the 1980's in Australia suggested a rapid increase in the number of people injecting

drugs with a possible average recruitment of 10%, with 5% leaving the injecting drug using population annually.

Numbers for people injecting drugs in Western Australia have been estimated at 2,500 to 5,000 regular and 10,000 to 12,000 recreational injecting drug users (Schwartzkoff and Watchirs, 1991). Researchers have been cautious about making estimates of prevalence over more recent years in Western Australia but indirect drug use measures tend to suggest it is increasing (Lenton, 1993).

One possible explanation for the growing number of injecting drug users in Australia is that since the mid 1980s the prevalence of amphetamine use has climbed (Reilly & Homel, 1988) with a resulting increase in the number of drug users choosing injection as the mode of administration (Aisbett, 1991; Hall & Hando, 1993, Hando & Hall, 1994). Spooner, Flaherty and Homel (1993) confirmed this trend when they found that, of a street intercept sample of young Sydney illicit drug users, amphetamines were the most commonly used illicit drug after marijuana with 61% of the sample having used amphetamines in the previous three months, one third of whom had injected the drug. According to Lenton (1993), from 1991 to 1993 amphetamine use became more prevalent nationally among the 20 to 25 year age group, particularly males and in Western Australia indirect measures, including arrest and seizure data, suggest amphetamine use has increased over recent years. Indeed, three years ago in

Western Australia fears were expressed in the media of the possibility of an increase in the spread of HIV due to the upsurge in amphetamine use among young people (Aisbett, 1991). More recently the Western Australian Director of Public Prosecutions issued warnings that Perth was "awash with amphetamines" (cited in Lang, 1995, p. 1).

The cost of street drugs and their impurity is also a principal factor in the number of drug users injecting drugs rather than using alternative routes of administration (Wodak, 1989). In places where drugs are less expensive and of higher purity users will also sometimes inhale or ingest their drugs. This is the case in Amsterdam where it is estimated that at least 60% of heroin and cocaine users do not inject but inhale, or 'chase the dragon' (Buning, van Brussel & van Santen, 1992). With the increasing prevalence of persons injecting drugs in Australia the potential to further fuel the HIV/AIDS and hepatitis C epidemics, through unsafe practices, is enhanced.

Needle Sharing

While injecting drug use is not in itself a risk factor in the spread of AIDS and hepatitis C the sharing of contaminated injecting equipment is. The extent to which injecting drug users share needles and syringes are dependent upon a number of factors. Studies have found that the most common reason given for sharing has been the difficulty in obtaining new equipment (Australian National AIDS and Injecting Drug Use Study (ANAIIDUS), 1992; Edgoose & Baillie,

1987; Ingold & Ingold, 1989; Loxley et al, 1992). The social context of drug use (ANAIIDUS, 1992) and broad social norms within the drug culture such as neighbourliness and mutual support also influence needle sharing (McKeganey & Barnard, 1992). Laws regulating the sale and possession of needles and syringes also effect needle sharing practices (Tsai et al., 1988; Anderson, 1991). Other reasons given for sharing include unavailability of clean equipment at times of urgency or desperation (ANAIIDUS, 1992; Ingold & Ingold, 1989) and lack of motivation to obtain new equipment (Edgoose & Baillie, 1987).

McKeganey and Barnard (1992) and Loxley et al (1992) found that most needle sharing involves sexual partners, close friends or family members who are considered 'safe'. It appears that women injectors, who tend to have injecting partners (Klee, 1993), may be more vulnerable to risk of infection with HIV and hepatitis C than their male counterparts, through sexual transmission and the more frequent sharing of their partner's used equipment (Barnard, 1993; Klee, 1993). Considering this, the possibility of further transmission to unborn infants is increased.

Studies reveal a decrease in HIV risk behaviours among injecting drug users, by either no longer injecting or reducing the incidence of equipment sharing (ANAIIDUS, 1992; Loxley et al, 1992; Power, Hartnoll & Daviaud, 1988; Ronald, Robertson & Roberts, 1992; Ross, Stowe, Wodak & Gold, 1993; Saxon, Calsyn & Jackson, 1994). However, as Wodak (cited in Loxley et al, 1992) points out:

although there are consistent local and international reports of reductions in unsafe injecting, and to a lesser extent sexual, practices, the baseline levels of these behaviours is very high, and relapse to HIV-related risk behaviour is increasingly recognised as a problem. (p. 691)

In Perth, Western Australia, results of the ANAIDUS study conducted by Loxley and her colleagues (Loxley et al, 1992) revealed that while respondents reduced their unsafe injecting to some extent, their needle sharing behaviour still placed them at a high level of risk of HIV. As there is a greater possibility of contracting hepatitis C than HIV in Australia these injecting drug users are at even greater risk of contracting a serious blood-borne disease.

Public Policy

Australia's response to the threat of the HIV/AIDS epidemic was led first by the homosexual community, followed by federal and state governments and other communities, leading to the development of a range of comprehensive policies culminating in the National AIDS Strategy (National Evaluation Steering Committee, 1992). One of the earliest committees formed was the National Advisory Committee on AIDS (NACAIDS) which was set up in 1984 to advise on educational, legal and social issues related to the epidemic and which made a substantial contribution to early education and allaying the public's fears about HIV/AIDS. From 1984 to 1987 the National AIDS Task Force was the guiding medical and scientific organisation. These two bodies were replaced in 1988 by the Australian National Council on AIDS. As the National Evaluation Steering Committee (1992) points out, Australia's response to HIV/AIDS has been

characterised by "strong national leadership and political commitment" (p. 19) with this country being one of the few countries to have a National HIV/AIDS Strategy .

Harm Minimisation

In view of the incurable nature of HIV/AIDS the federal government in Australia adopted a prevention approach to the transmission of the disease. A critical factor in this response was the National Campaign Against Drug Abuse in 1986 with its principle aim "to reduce the harmful effects of drugs on Australian society" (Blewett, 1987). The principle of harm minimisation recognises that there is a broad spectrum of levels of drug use, acute and chronic, and of associated risks and physical harm (National Drug Strategy Committee for the Ministerial Council on Drug Strategy, 1993). People everywhere use drugs of one kind or another for different reasons, and most drugs can be used in ways that are safe or ways that are harmful, and also in ways that are deadly ("Harm reduction", 1991). With this in mind the concept of harm reduction was perceived as a more realistic aim than the unachievable goal of a drug free society (Wodak, 1992). There was also a growing belief throughout the 1980s that a harm minimisation approach was more realistic than the more rigid medically based ideas of "treatment", "cure" and "abstinence" (Berridge, 1990, p. 343) which had previously dominated.

While not abandoning the old strategies new ones emerged in response to more enlightened and realistic thinking about drug use. For example Prochaska and

DiClemente (1986) suggested that drug users go through a number of stages in the process of change. These included precontemplation (when persons are not contemplating change and are resistant to it), contemplation (thinking about changing and weighing up the pros and cons of continued using and abstaining), action (taking action to stop using) and maintenance (maintaining change and preventing relapse). More recently another stage, preparation (intending to change in the near future), has been included between contemplation and action (Prochaska, DiClemente & Norcross, 1992). An individual may move forward or relapse to a former stage. The previous ideas of treatment, cure and abstinence are useful strategies for persons who are in the action and maintenance stages of change. Precontemplaters, however, don't want to change; contemplaters are ambivalent about it; and preparers are not quite ready, so it is for these individuals that harm reduction strategies may be most appropriate.

Moreover, the phenomenon of natural remission from drug dependence and addiction was becoming increasingly recognized (Peele, 1989). In the case of heroin Winick (cited in Peele, 1989) had found as early as the 1960s that most adolescent and young adult heroin addicts in New York outgrew their addiction by their mid-thirties. More recently Stimson and his colleagues (Stimson, Oppenheimer & Thorley, 1978) found in a follow-up study of heroin 'addicts' known to have attended London drug dependence clinics seven to eight years earlier that at least 40 people out of the original cohort of 128 had achieved abstinence, the large majority having no treatment after withdrawal. This *maturing*

out, as the phenomenon has become known, demonstrates the human potential for change and "provide[s] an antidote to long-indoctrinated images of the ever-deepening spiral of heroin addiction" (Peele, 1989, p. 176). Waldorf (1983) too, could see the possibility for change and declared that dependent users or 'addicts' (especially heroin 'addicts') are caught in a pattern of abstinence and relapse, that ends up in either death or a stable, drug free life. By minimising the harm associated with the use of drugs, individuals are helped through a phase in their lives and have the chance to hopefully overcome their drug use in the future through either treatment or natural recovery (Waldorf, 1983) without contracting a life-threatening disease.

With the advent of HIV and hepatitis C the potential dangers of injecting drugs were enhanced markedly, in light of the deadly nature of the diseases.

By introducing harm reduction strategies to help prevent infection with these viruses, injecting drug users may live long enough to stabilize their lives. For as Dave Purchase, the Director of an illegal needle exchange in Tacoma, Washington in the United States said in relation to HIV/AIDS and injecting drug use: "you can overcome being stupid, but you can't overcome being dead" (cited in "Harm Reduction Conference", 1992, p. 21).

Furthermore, it was recognised that there were a substantial number of non-dependent drug users in the community (Spooner, 1988) who were at potential risk of contracting and transmitting disease to others. In outlining some of the

characteristics of the injecting drug using population Spooner (1988) categorised these users as dependent users; non-dependent regular users; and non-dependent recreational, occasional and experimental users and suggests that the non-dependent users represent a much larger proportion of the total of injecting drug users. Moreover, individuals were known to move between categories and between using and non-using status. Although the incidence of HIV among dependent users may be greater, the non-dependent group being numerically larger possibly have the greater potential for viral transmission (Spooner, 1988).

All of these factors, plus the increasing concern of health workers and the general public over the spread of AIDS which was a major impetus to the decision to adopt a harm minimisation policy (Luger & Batey, 1993), have impacted on the adoption and acceptance of the pragmatic approach of the Australian Government towards the prevention of HIV/AIDS and hepatitis C. And, as Luger and Batey (1993) add, "few would have problems accepting the notion that substance users should be spared serious, destructive consequences associated with their activities" (p. 3).

Harm Reduction Strategies.

In the realm of HIV/AIDS, harm minimisation took two forms, education and prevention, in an effort to eliminate transmission of the virus (Department of Community Services and Health, 1989). Education was targeted to specific groups which included people whose activities placed them at greater risk of infection -

and those affected - including homosexual/bisexual males and injecting drug users; carers of people with HIV including professional care givers; and the general community. Safer sexual practices were advocated which included alternatives to intercourse and the use of condoms. In relation to the injection of drugs, strategies for avoiding unsafe drug use involving contaminated injecting equipment were promoted. A hierarchy of messages was aimed at various injecting drug using audiences. These included: preferably, don't use drugs; if you must use, don't inject; if you must inject, don't share; if you can't help sharing, clean your needles with bleach (Loxley, Marsh, Westlund and Watson & Kosky, 1990). To discourage sharing of injecting equipment needle and syringe distribution and disposal programs were initiated which entailed the implementation of needle exchange and outreach programs, the sale of sterile injecting equipment through pharmacies and the introduction of needle vending machines. Injecting drug users were encouraged to clean used injecting equipment with the use of bleach, if they were to be re-used. Furthermore drug substitution programs were expanded, relaxing the previous strict criteria for entry, to enable persons access to oral methadone as a substitute to injection of heroin, thus reducing the number of injecting drug users and the consequent harm associated with this mode of administration (Wodak, 1990; National Methadone Policy, 1993). As Cuatt (1989) notes, by educating injecting drug users of the potential danger of HIV infection through unsafe practices and making sterile injecting equipment widely available and accessible, it was reasonable to assume that needle sharing behaviour would decrease.

Needle and Syringe Supply

As a result of the governments' prevention strategies, since 1986 in Australia sterile injecting equipment has been made available to injecting drug users. Needle exchange programs, outreach vans and vending machines have been introduced in locations where there are significant numbers of injecting drug users (Crofts, 1992; Dodding, 1993?; Dolan, 1989; Loxley et al, 1990; "IV drug users," 1989). In addition, pharmacists have been encouraged to sell sterile injecting equipment to injecting drug users, thereby assuring availability in both metropolitan and rural areas. The Pharmacy Guild of Australia and the Pharmaceutical Society of Australia supported the strategy but left the decision to supply needles and syringes to drug users to the professional judgement and discretion of individual pharmacists (Cuatt, 1989; Tsai et al, 1988).

Western Australian Initiatives

In Western Australia a harm minimisation policy was adopted and promoted by the Health Department of Western Australia and the AIDS Council with the hierarchy of messages being promoted to various injecting drug using audiences. In late 1986 a decision was made by the Health Department of Western Australia to promote the sale of sterile injecting equipment to injecting drug users by pharmacists, who were seen to be "accessible, strategically placed, already selling needles and syringes to diabetics and had a legitimate role in health care" (Loxley et al, 1990, p. 14).

Under the joint auspices of the Health Department of Western Australia and the Pharmaceutical Council the SS5 Kit Pharmacy Program was established in July 1987 (Kerry, 1994). The SS5 Packs, consisting of a plastic bag containing one sterile needle and syringe, a swab, condom, lubricant, a rigid disposal container and an information pamphlet were supplied by the AIDS Bureau free to pharmacists, who added four needles and syringes and sold them at a profit. By 1990 56% of metropolitan and 25% of country pharmacies were participating in the program (Swensen, Westlund & Baker, 1992). In July 1992 the Pharmacy Fitpack Program replaced the SS5 Kit Pharmacy Program (Kerry, 1994). Fitpacks are a specially designed black plastic pack which holds five needles and syringes. The packs are designed to provide a safe and convenient method of storing and carrying first sterile, then used needles which may be locked securely in place and the Fitpack disposed of in a public waste disposal bin. The Pharmacy Fitpack Program was initially subsidised by the Health Department of Western Australia, but since 1992 it has been a commercial operation for pharmacists who now deal with wholesalers directly to replenish their supplies (Kerry, 1994). Figures from order forms indicate that approximately 78% of Western Australian pharmacies are currently involved in the sale of Fitpacks (Kerry, 1994).

The Law

In almost all developed countries legal access to sterile injecting equipment has been a primary public health approach to help prevent the transmission of HIV among injecting drug users (Des Jarlais & Friedman, 1992). The most notable

exception is the United States where this strategy has remained highly controversial with only a few localities adopting it. Des Jarlais and Friedman (1992) note that opponents of legal access to injecting equipment in the United States have argued that such a strategy would "not work to reduce HIV transmission", would "encourage" or "condone" illicit drug use, would "send the wrong message" and would "undermine our war on drugs" (p. 45). In New York City in particular, proposals for the distribution of clean injecting equipment to drug users have provoked vehement opposition (Anderson, 1991). The abandonment of a needle exchange trial in New York was due to social and political resistance. Even clear evidence from overseas that the provision of needles and syringes reduced needle sharing without increasing addiction, "was outweighed by the policy's symbolic affront to social order" (Anderson, 1991, p. 1515).

In Australia, at the time the policy to supply needles and syringes to persons who injected drugs illicitly was first implemented, it was an Aiding and Abetting offence under the Criminal Code in most States and Territories (Schwartzkoff & Watchirs, 1991). Some State Governments amended legislation almost immediately to indemnify pharmacists and needle exchange workers from prosecution. In other States, including Western Australia, agreements were reached between State Health Departments, AIDS Councils and the police to enable the distribution of sterile injecting equipment, while lobbying for legislative change. Western Australia was the last state to have legislation

amended to remove legal restrictions from the distribution of needles and syringes, although supply has been unofficially condoned and implemented since 1987.

As previously discussed, it was still illegal to provide needles and syringes to injecting drug users in Western Australia at the outset of this research endeavour. Legal sanctions were removed, however, when the Poisons Amendment Act 1994 was proclaimed on May 24, 1994 making it legal in Western Australia, for persons gaining the approval of the Commissioner of Health, to provide needles and syringes to injecting drug users. A special edition of the Western Australian Government Gazette on May 26, 1994 outlined the regulations, duties and requirements of persons engaged in the provision of needles and syringes and included a copy of the application for approval required to conduct such programmes (Poisons Amendment Regulations 1994). Copies of the Poisons Amendment Act 1994, the special edition of the Government Gazette and a Poisons Act 1964 Form 14, Application for approval of needle and syringe program (see Appendix A), were posted to all Western Australian community pharmacists and needle exchange operators (K. Kerry, personal communication, October 6, 1994). Concerns were expressed by some pharmacists in relation to having to gain approval for an activity they had been involved in for some time in the public interest, and the fact that they were expected to submit yearly reports (K. Kerry, personal communication, August 20, 1994). In light of the concerns expressed, the Pharmaceutical Council of Western Australia negotiated with the

government to enable the Council to gain a blanket approval for all pharmacists. On September 5, 1994 the Pharmaceutical Services Branch of the Health Department of Western Australia granted permission to the Pharmaceutical Council to coordinate the program for blanket approval for pharmacists to sell Fitpacks only for a term of 12 months (B. Fry, personal communication, January 19, 1995). The sale of needles and syringes to injecting drug users in other forms required the pharmacists to personally apply for approval to do so.

Although supplying needles and syringes to injecting drug users was illegal (although condoned) in Western Australia until May 1994 an increasing number of pharmacists were providing them. Between 1990, when 44% of pharmacists overall were involved in the SS5 Pack Program (Swensen et al, 1992) and 1994 a further 34% had adopted the practice. It is apparent that the majority of pharmacists were not deterred by the legislation but some still did not supply and the reasons for this were not known. Neither was there any information available concerning the reasons for the change in pharmacy policy of those who have adopted the practice.

Deterrence Theory

Deterrence theory is based on the premise that "the more the individual perceives legal sanctions as certain, swift and/or severe, the greater is the perceived cost of crime and thus the probability of deterrence" (Williams & Hawkins, 1986, p. 547). According to Homel (1988) *certainty* of punishment is historically

regarded as the most important of these variables rather than the mere existence of legal sanctions. Homel explains that the argument for deterrence as a tool for social control is based on the premise that the behaviour of humans can be modified by making them fearful of the consequences of committing illegal acts. In the words of Gibbs (cited in Homel, 1988): "*Deterrence* can be thought of as the omission of an act as a response to a perceived risk and fear of punishment for *contrary* behaviour" (p. 22).

The classic example of deterrence theory most often quoted is that of the effectiveness of Random Breath Testing (RBT) in New South Wales where there is a high probability of drivers being stopped and breathalysed and penalties for drink drivers are certain, swift and severe (Homel, 1988). A more recent example of the application of deterrence theory is reported by Woods (1995) and relates to the sale of tobacco products to persons under 18 years of age in Western Australia. Although being illegal since 1917 the activity was widespread, penalties were small (\$4 for a first offence) and no prosecutions were recorded. The passing of the Tobacco Control Act 1990 increased penalties for sale of tobacco products to persons under 18 to \$5,000 for individuals and \$20,000 for corporate bodies for a first offence. A study conducted 14 months after the law came into effect found that this alone was not enough to deter the majority (89%) of tobacco retailers (cited in Wood, 1995). Based on deterrence theory principles the Health Department of Western Australia devised and applied "the 3 Ps of prosecution, publicity and persuasion" (Wood, 1995, p. 8). This resulted in much publicised

prosecutions with penalties ranging consistently between \$500 and \$1,000 plus court costs. Within two years a further study showed that the percentage of retailers prepared to sell tobacco products to minors had dropped dramatically by 61% to 28%.

Although the sale of needles and syringes to injecting drug users was illegal in Western Australia there was an unwritten agreement that it would not be enforced. It was considered useful to use this study to determine whether the legal status in this context had any effect on needle and syringe supply. If deterrence theory is correct then mere legislation would not deter.

Attitudes to Injecting Drug Users

According to Wodak (1992) the prevailing public image of drug users in the mid 1980s was of "psychopathic demons" (p. 557). However, within a few years this image had modified with increasing attention directed to the complex nature of drug use and the deficiencies in the treatment system, so that rather than being seen as "archetypal villains" injecting drug users were seen, in part, as victims. As Wodak points out "without this change in image, it would not have been possible to generate public support for some of the more controversial measures required to control HIV infection in this risk group" (p. 557).

While Wodak (1992) contends that injecting drug users "are still demonised to some extent in Australia" (p. 557) MacCarthy (1994) claims that discrimination

against injecting drug users is widespread. In an article in the National AIDS Bulletin MacCarthy (1994) asserts that "the concept of discrimination is based on fairness [the principle of which] ... does not apply to groups that are perceived to make lifestyle choices" (p. 32). Therefore society generally justifies discriminating against injecting drug users as injecting drug use is seen only as a lifestyle choice and, at some time in an injector's life, a decision to inject was made. Other factors at play that may help explain the extent of discrimination against injecting drug users are listed by MacCarthy as: the illegality of the drugs and most associated behaviours; injectors being considered criminals unlike other law breakers who may speed, litter, cheat on taxes etc; views of injecting drug users coming more from moralistic and often incorrect information rather than from accurate research/facts; and negative and emotive media portrayal of injecting drug users. According to MacCarthy, one of ways that discrimination manifests itself is in the poor response injecting drug users generally experience to a wide range of services.

In a British study of general practitioners Abed and Neira-Munoz (1990) found that the majority of general practitioners believed that drug users were deceitful, unreliable and uncooperative patients, that their problems were of their own making and that drug dependence was not a medical problem. On the other hand, only about one third of general practitioners saw drug dependence as morally wrong. Abed and Neira-Munoz (1990) stressed that although their study, and that of Glanz (cited in Abed & Neira-Munoz, 1990), highlighted definite negative

attitudes towards drug dependents some positive attitudes were also demonstrated, particularly by younger general practitioners who were more prepared to take an active part in their management.

Although MacCarthy (1994) claims widespread discrimination of injecting drug users in Australia it appears that Wodak's (1992) assertions of a moderation in image may have occurred among the pharmacists' fraternity, considering the adoption of the governments' harm reduction initiatives by pharmacists. However, it is not known what the attitudes of pharmacists in Western Australia are towards injecting drug users, or to what extent this impacts on the supply of sterile injecting equipment to injecting drug users.

Previous Australian Studies

A literature search has located nine previous Australian studies, including two from Western Australia, relating to the supply of needles and syringes by pharmacists to injecting drug users. The purpose of the studies differed slightly and focused on a number of research questions ranging from attitudes of pharmacists regarding the provision of needles and syringes to injecting drug users to evaluations of the programs that supplied packs of needles and syringes. Both Western Australian studies were evaluations of the needle-pack program current at the time. A variety of sampling procedures and data collection methods were used. A summary of the studies and their characteristics are outlined in Table 1 with the main findings presented in the following section.

Table 1
Review of Australian Studies

Author	Year	State	Area	Sample	Response Rate	Method	Selling Practice		Research Question
Guastella, R. & Roller, L. Victorian College of Pharmacy	1986	Victoria	Metro	Random Sample N = 38	95%	Interview Schedule	C/S N/S	36% 64%	Attitudes to selling N&S to IDUs.
Jennings, G. Health Promotions, Victoria	1987	Victoria	10 Rural Cities	All Pharmacists N = 85	96.50%	Telephone Interview Pre-posted schedule	C/S N/S P/S	63% 32% 5%	Attitudes on AIDS and the availability of N&S to IDUs.
Monash Medical School Melbourne, Victoria	1987	Victoria	Metro	Systematic Sample N = 96	86.40%	Interview Schedule	C/S N/S P/S	45% 46% 9%	Attitudes and practices in relation to the sale of N&S to IDUs.
Tsai, Goh, Webeck & Mullins Epidemiology, Health Dept. NSW	1987	NSW	Metro & Country	Stratified Random Sample N = 110	96%	Telephone Questionnaire			Attitudes towards existing N&S distribution and needle exchange programs and role in educating clients.
Mullins, R. M. Health Promotions Unit Health Dept. Victoria	1989	Victoria	Metro & Country	All Victorian Community Pharmacists	38%	Mail Questionnaire	C/S N/S P/S	29% 26% 14%	Pharmacists willingness to participate in initiatives to increase sales.
Cuatt, L. Tasmanian AIDS Council	1989	Tasmania	Whole state	Pharmacy Guild members N = 150	48%	Mail Questionnaire	C/S N/S	32% 68%	Attitudes and practices of pharmacists regarding the sale of N&S to IDUs.
Swensen, Westlund & Baker Health Department of WA	1990	WA	Whole state	-	-	Study of order forms for the SS5 Pack	C/S Metro Country	44% 56% 25%	Evaluation of SS5 Pack Program.
MSJ Keyes Young NSW AIDS Bureau	1991	NSW	Metro & Country	Purposive Sample N = 80	58%	Mail Questionnaire			Evaluation of the Fitpack Program.
Greig, R. WA AIDS Bureau	1992	WA		Purposive Sample N = 114	97.40%	Telephone Interview	C/S N/S P/S	86% 10% 5%	Evaluation of the Fitpack Program

Note. C/S = Current sellers; P/S = past sellers; N/S = never sold; N&S = needles and syringes; IDUs = injecting drug users.

Pharmacists' Perceptions of the Seriousness of HIV/AIDS

Public health.

Indications are that the majority of Australian pharmacists recognise the serious implications of HIV/AIDS. In a Melbourne study, when asked to list the three most important health problems facing Australia, pharmacists gave an overwhelming priority to AIDS, which accounted for 51% of first mentions and 26% of all mentions (Monash Medical School, 1988). The researchers commented that even allowing for the respondents' awareness that AIDS was the main topic of the study, it was clear Melbourne pharmacists did not underestimate the gravity of the HIV epidemic. However, results from Jennings (1987) study revealed that fewer Victorian rural pharmacists (46.4%) saw AIDS as a major public health issue in Victoria. A similar result was elicited by Cuatt (1989) in Tasmania where 43% of pharmacists perceived AIDS to be a serious or reasonably serious public health risk.

Injecting drug users.

A higher proportion of pharmacists believed injecting drug users to be at greater risk of AIDS than the general population. In Tasmania 89% of pharmacists believed that AIDS was a very serious or reasonably serious health risk for intravenous drug users in that state. Two thirds (65.8%) of rural Victorian pharmacists saw the risk of spreading AIDS through injecting drug use as high to very high and 79% saw the connection between needle sharing and the spread of AIDS as very strong (Jennings, 1988). Figures from the Melbourne study also

indicated 56% of pharmacists thought there was a high risk of HIV infection spreading extensively among injecting drug users from whom, pharmacists believed, the potential for further spread to the general population was moderate to very high (Monash Medical School, 1987).

Pharmacists' role in relation to AIDS.

In Victoria 82% of pharmacists believed they had a special role in relation to the control of AIDS (Jennings, 1987; Monash Medical School, 1988). The main role they saw for themselves was the provision of advice and counselling. Dispensing literature on AIDS and drug rehabilitation was seen as appropriate in many country pharmacies and 82.9% of pharmacists were prepared to do so (Jennings, 1987). The other most frequently nominated roles were the sale of needles and syringes to injecting drug users and the sale of condoms.

Summary.

It is apparent from these studies, which were all conducted soon after the initiatives to provide needles and syringes were implemented, that pharmacists were well informed of the seriousness of HIV, especially to injecting drug users. The majority of pharmacists also believe that they have a special role to play in relation to the control of AIDS.

Needle Supply Practices

An increasing number of pharmacists throughout Australia have taken up the challenge to help prevent the spread of blood-borne disease by adopting the harm reduction strategy of supplying sterile injecting equipment to injecting drug users. This trend was first noted in New South Wales by Tsai, Goh, Webeck and Mullins (1987) who found that there was a significant favourable shift in pharmacists' attitudes towards selling needles and syringes to injecting drug users in the four months between the public launch of the Anti-AIDS Kit in December 1986 and the survey conducted in March 1987, from 14.1% before to 57.6% after the launch. While the survey results revealed that over half the pharmacists supported the needle distribution program only 11.9% actually sold Anti-AIDS Kits at the time. The other 45.7%, however, were willing to supply but had not been approached. The majority of pharmacists in New South Wales now supply sterile injecting equipment, and many are also involved in needle exchange. One of the factors that probably influenced the early and rapid adoption of the sale of needles and syringes in that state was that, in 1985, the New South Wales Government amended legislation thereby removing the sanctions of selling or possessing needles and syringes.

Figures from Victoria indicate that although needle and syringe supply started well, it increased at a slower pace. For example an early study by Guastella and Roller (1986) found that of 36 randomly selected Melbourne pharmacists 36% had sold needles and syringes to injecting drug users and a further 11% intended

to. In comparison, four years later in 1990 Mullins (1990) reported that 59% of pharmacists were current sellers, representing only a 12% increase in that time, although 14% of pharmacists in this study were past sellers. Mullins' study however only had a 38% response rate so the representativeness of the sample comes into question. In addition, it could be argued that another factor that may effect the comparison between the two studies is that the first study was of metropolitan pharmacists only, while Mullins surveyed all Victorian pharmacists. However the findings of two other studies in 1987 would not support this argument as the Monash Medical School's (1987) survey of metropolitan pharmacists found that 45% were current sellers, compared to Jennings (1987) findings that 63% of pharmacists in 10 country cities were current sellers and a further 11% intended selling.

The Tasmanian experience differed again and pharmacists were much slower in adopting the practice of selling needles and syringes to injecting drug users. The results of Cuatt's (1989) study indicated that by 1989, only 32% were selling sterile injecting equipment to the general public. At that time, however, it was still an offence in Tasmania to possess a needle and syringe if it was to be used to administer an illegal substance, a factor which affected 31% of the non-sellers who responded that a change in the legislation would encourage them to supply. In addition, the Tasmanian State government did not support the strategy to the same extent as other state governments at that time.

In Western Australia evidence shows that the number of pharmacists selling needles and syringes has increased despite the former legal sanctions. For instance, in 1988 there were 72 outlets selling Fitpacks, which increased to 196 by 1990, 44% of the total Western Australian pharmacists (Swensen, Westlund & Baker, 1990). Of these, there were 169 metropolitan and 25 country pharmacists, a participation of 56% of metropolitan and 25% of country pharmacists. In 1994 Kerry (1994) reported that, based on information from order forms, approximately 78% of pharmacists were selling Fitpacks, a 34% increase since the earlier study. As these figures are only related to the sale of Fitpacks and don't include needles and syringes sold in other forms it is possible that an even higher percentage of pharmacists are involved in the provision of needles and syringes to injecting drug users in Western Australia. This was the case in Greig's (1992) earlier survey of pharmacists where 83% of pharmacists sold Fitpacks and a further 3% sold only single needles and syringes to injecting drug users. It is interesting to note that according to Greig's study, 83% of pharmacists were selling Fitpacks in 1992 compared with the 78% quoted by Kerry in 1994. Considering the proportion of current sellers in Western Australia it is apparent that the legislation did not deter the majority of pharmacists from adopting the harm reduction strategy of supplying needles and syringes to injecting drug users. It must be remembered however, that the practice was officially condoned.

Difficulties Experienced by Pharmacists

The most common factor cited for not selling needles and syringes was concern about injecting drug users frequenting the pharmacy (Tsai et al, 1988; Cuatt, 1989; Monash Medical School, 1987; Guastella & Roller; Greig, 1992). For example in the early days of needle and syringe supply Guastella and Roller (1986) found that for 55% of pharmacists who said they did not intend to sell needles and syringes to injecting drug users the commonest reason given was that they did not want to attract 'this type of person'. Some felt they would be overcome by 'undesirable's. Tsai, Goh Webeck and Mullins (1987) also found that the majority of pharmacists who said they would not sell Anti AIDs Kits were worried about the anti-social behaviour of injecting drug users. More recently, of Western Australian pharmacists who had never sold 54% did not like the clients and feared assault (Greig, 1992). More specific reasons given include increased security risk and shoplifting (Tsai et al, 1988) and drug abusers being aggressive and unpleasant - cited by 94% of nonsellers (Monash Medical School, 1987). However, the Monash Medical School (1987) claimed that fear from the behaviour of injecting drug users was, to a large extent, was not borne out by the experience of the pharmacies that did sell. Other factors cited for not selling included moral and ethical reasons, belief that it would increase drug addiction, adverse effects on other customers, complaints from other customers and legal uncertainty in one case already mentioned.

An average of 7.9% of past sellers were identified in four surveys, ranging from 4.5% to 14% (Greig, 1992; Jennings, 1987; Monash Medical School, 1987; Mullins, 1990). Past sellers main reasons for no longer participating included fear and/or experience of threat and/or assault (Jennings, 1987; Greig, 1992) undesirable or disruptive customers (Jennings, 1987), the unsavoury nature of the practice and harmful effects on the business (Monash Medical School, 1987). There is little information about problems experienced by current sellers. MSJ Keys Young, however reported that 25% of current sellers did not like the customers that Fitpacks bring. In addition, the study conducted by the Monash Medical School (1987), just before the legislative change to permit needle and syringe supply, found that the main factor troubling current sellers was uncertainty about the legal and ethical principles of the practice.

Summary

From the studies reviewed the main difficulty for pharmacists, regardless of supply practice, concerns having injecting drug users in their pharmacy and the associated problems. However, the legal ramifications was a consideration in some instances where it was still an offence to supply needles and syringes to injecting drug users.

Review Summary

This chapter has presented the background to the provision of needles and syringes to injecting drug users by pharmacists. It reveals why it is important that

these initiatives be continued and identifies issues that may impact on supply practice. The review of previous studies has additionally revealed attitudes, practices and experiences of pharmacists regarding these issues.

CHAPTER THREE

Method

Organisational Support

In conducting this research endeavour every effort was made to ensure its smooth running, embracing ethical principles to legitimize the study and enhance the cooperation of pharmacists, ever mindful that a good response would add weight and credibility to the findings. An important aspect of this approach was to elicit the support of the pharmacists' professional organisations.

In Western Australia two professional organisations with which pharmacists are associated are The Pharmaceutical Council of Western Australia and The Pharmacy Guild of Australia. The Pharmaceutical Council, which is the administrative body of the Pharmaceutical Society of Australia in Western Australia, is the organisation with which all community pharmacists are registered. The Council also administers the pharmacists' trainee programme and provides continuing education for pharmacists (Megan Williamson, personal communication, September 14, 1994). The Pharmacy Guild, of which 95% of Western Australian community pharmacists are members, is an employee organisation registered with the Federal Industrial Commission, and aims to

"represent the interests of members in industrial matters and to further and protect the interests of, and generally do anything which may be considered beneficial for, its members" (Nick Geronimos, personal communication, September 14, 1994). Because of the involvement of these organisations both were approached prior to the commencement of the study in order to inform them of the proposed research and enlist their support.

Consultation took place with both organisations during the development of the pilot and final questionnaires. Both organisations endorsed the study and have expressed their interest in receiving the final results. In addition a Survey Certificate was issued by The Pharmacy Guild of Australia (see Appendix B) with a number and rating to be conveyed to pharmacists as an indication of the Guild's approval of the study. Approval of the pharmacists' professional bodies was sought out of courtesy and for the sake of a smoothly executed study (Gay, 1987, p. 102).

Research Design

A descriptive research design was employed "to answer questions concerning the current status of the subjects of the study" (Gay, 1992, p. 251), utilising the self-report mail survey method for the collection of data. According to Isaac and Michael (1971) this is an appropriate method to determine what others are doing in similar situations, make comparisons, and benefit from their experience in making future plans and decisions. As the study included pharmacists throughout

Western Australia a mail survey was chosen because of its usefulness in gathering data from persons in "widely scattered locations covering a large geographical area" (Clover & Balsley, 1979, p. 95).

Sample of Subjects

Based upon information provided by The Pharmaceutical Council of Western Australia there are 466 registered community pharmacies in Western Australia. From the list of these pharmacies provided by the Council a stratified random sample ($N = 130$) was selected on the basis of metropolitan and country location. Metropolitan pharmacies were distinguished as those within the Perth local telephone call range. Of the 130 subjects chosen 85 (65%) metropolitan and 45 (35%) rural pharmacists were targeted. This did not represent an equal proportion of metropolitan and country pharmacists, which was 74% and 26% respectively. There were two reasons for altering the ratio of pharmacists for the study. Firstly, based on the true ratio, only 34 country pharmacists would be targeted and, considering the average response rate was 48% in similar Australian studies utilising self administered questionnaires (Mullins, 1990; Cuatt, 1991; MSJ Keyes Young, 1991), a return of only 16 questionnaires could reasonably be expected. With the further division into sellers and non-sellers, bearing in mind Kerry's (1994) claim that The Pharmacy Fitpack Program currently operated from 78% of pharmacies across Western Australia, the numbers could be reduced to cells of approximately 12 sellers and 4 non-sellers which would not give significant power for the analysis. Secondly, previous formal studies regarding the issue of needle

and syringe supply have not surveyed country pharmacists in Western Australia, and it was thought that by increasing the ratio of country pharmacists in this research this deficiency could be redressed.

Using a standardised telephone interview format (see Appendix C) the pharmacist in whose name the pharmacy was registered was approached to complete the self administered questionnaire. It was found in some cases however, that a manager ran the pharmacy, so in these instances the manager was asked to participate. In three cases a re-draw was made for the following reasons:

1. One pharmacy did not answer the telephone after being called three times on each of four successive days. Two further calls on two days of the following week also failed to elicit a response.
2. Two pharmacies drawn from nearby country towns were owned and run by the same pharmacist who travelled between them, each pharmacy having his services at certain times. Needles and syringes were not sold at either pharmacy due to there being no demand. It was felt that it would serve no purpose to have the pharmacist complete two questionnaires.
3. One pharmacist was on holidays for four months and a locum was running the pharmacy. As information sought was related to the attitudes and practices of the pharmacist who owned or managed the pharmacy and who was involved in making policy decisions, a re-draw was made.

Questionnaires

Two separate questionnaires, relevant to the current selling practice of pharmacists, were specifically designed for the study (see Appendixes D and E). The content of both questionnaires was the same except for the sections concerning current selling practices. Adoption of this strategy minimised the need for numerous special instructions and decreased the length of the questionnaires. This had the benefit of ease of self-completion by respondents with a view to increasing the response rate.

Pilot of the Questionnaires

Initially the questionnaires were piloted by 14 persons including nine health professionals, two alcohol counsellors, two general practitioners and three pharmacists. This represented "professionals who understand the study's purpose, ... potential 'users' of the data [and] people ... from the population to be surveyed", a strategy suggested by Dillman (1978, pp. 156-157). Persons other than pharmacists were asked to adopt the role of seller, non-seller or past seller as indicated on the top of the questionnaire so that all sections of the questionnaires were tested. A brief statement (see Appendix F), outlining the study's purpose and the procedure to be undertaken in conducting the survey was included, with a request for comments on any difficulties or ambiguities found in the questionnaire, suggestions for improvement and for the time it took to complete.

All respondents agreed that the format of the questionnaires was appropriate, unambiguous and the questions easy to complete. The average time for completion was 17 minutes, ranging from seven minutes to 40 minutes. There were seven suggestions for inclusion of extra question categories, each of which was given careful consideration resulting in one finally being adopted. This was the inclusion of "vending machines" in Item 8 which asked where pharmacists think needles and syringes should be obtained. In addition, the suggestion that the words "the prevention of" be included in Item 7 was also adopted to now read, "What role do you think pharmacists should play in relation to the prevention of HIV and Hepatitis"?

Content of Questionnaires

The questionnaires were divided into a number of domains including public health, needle and syringe distribution, current practices, legislation, attitudes to injecting drug use and injecting drug users, and demographic details. Ordering of the questions was based on suggestions by Dillman (1978). This included placing questions which respondents were most likely to see as socially important or useful first and the least useful last; grouping questions of similar content together, and within content areas, by type of question; and taking advantage of cognitive ties that respondents were most likely to make among groups of questions.

Public health.

The first set of questions related to pharmacists' beliefs about public health in relation to HIV, hepatitis C and injecting drug use. This section was included in an effort to gauge pharmacists' perception of the significance of these issues in Western Australia and what they believe their role to be in relation to the prevention of HIV and hepatitis C.

Needle and syringe distribution.

To determine pharmacists beliefs concerning needle and syringe distribution this section included questions concerning where (e.g., hospitals, drug treatment agencies, pharmacies), and how (e.g., buy, exchange) injecting drug users should obtain new equipment. Other questions related to pharmacy policy regarding the sale of needles and syringes to injecting drug users and whether pharmacists supported the government's harm minimisation strategy concerning needle and syringe supply. Also included in this domain was a question regarding training in an attempt to ascertain to what extent pharmacists have had training regarding the supply of injecting equipment to illicit drug users, and to identify whether there was a need in this area.

Current practices.

This domain focused on pharmacists' practices in relation to the supply of needles and syringes to injecting drug users in the pharmacy in which they were currently located. As mentioned earlier, questions in this domain differed for pharmacists

who do and do not sell needles and syringes. As this section included some potentially sensitive items it was placed towards the centre of the questionnaire with the more sensitive items embedded within other items (Dillman, 1978).

For the pharmacists who do supply needles and syringes to injecting drug users, items included when they commenced supply; factors influencing the decision to supply; in what form they were supplied (e.g. Fitpacks, single syringes, etc); approximate quantity; and cost to the customer. This domain was also concerned with problems experienced in the pharmacy concerning sale of needles and syringes and the influence this had on selling practice.

For the non-sellers this domain included questions concerning supply of needles and syringes to persons other than illicit drug users, whether needles and syringes had been sold to injecting drug users in the past and future intentions regarding supply of injecting equipment. Reasons for not supplying were determined and problems experienced in the pharmacy concerning injecting drug users and the influence on selling practices were identified. To conclude this domain both questionnaires included a question concerning the dispensing of methadone to see whether differences exist between sellers and non-sellers.

Legislation.

With the recent change in legislation enabling pharmacists and health care workers to legally supply needles and syringes to injecting drug users this domain

was included to determine pharmacists' knowledge of the current legal status of supply, and its effect on selling practice. In addition, it aimed to indicate the deterrent effect of the legal status of needle and syringe supply before the change.

Attitudes to injecting drug use and injecting drug users.

In order to gauge pharmacists' attitudes toward injecting drug users this domain was included utilising questions from an instrument devised by Ross and Darke (1992), the Attitudes Towards Injecting Drug Users Scale (AIDUS). For convenience and to contain the length of the questionnaire, ten questions were selected from the 50 item scale. The items were selected based firstly, on their having obtained a correlation co-efficient in the moderate to strong range when tested by Ross and Darke for test-retest reliability, and secondly, on their perceived appropriateness. As previously discussed attitudes to drug users can influence the outcome of treatment and by ascertaining pharmacists' attitudes towards injecting drug use and injecting drug users it could give some clue as to whether this affects supply practices.

Demographic details.

Contrary to the current convention (Tony Fetherstonhaugh, personal communication, April 6, 1994), demographic details were placed at the end of the questionnaire. As Dillman (1978) points out, it has often been believed that placing this section at the beginning results in fewer nonresponses to these crucially important items and that they act as icebreakers giving respondents time

to settle. However Gay (1992), Babbie (1986) and Dillman (1978) agree that in a mail questionnaire demographics should be placed at the end because there is no need for icebreakers as there is no interviewer present to generate nervousness. In addition, according to Dillman (1978) experience shows that placing these personal details at the end of a mail questionnaire does not lead to nonresponse, and in his opinion this may be because respondents view the filling out of the earlier pages of the questionnaire as an investment and unless they fill out the personal details the investment is lost.

For the demographic section of the current study items included personal details of pharmacists concerning year of graduation, length of time working in the profession, time in the current pharmacy, age and gender. Details of the pharmacy were also sought including staff numbers, location, opening hours, customer groups and postcode.

To conclude the questionnaire pharmacists were invited to add further comments on the issues in the questionnaire or suggested strategies that might be useful for pharmacists in dealing with injecting drug users. Finally pharmacists were asked to indicate whether they required a summary of the results.

Reliability and Validity of the Questionnaires

The questionnaires were designed using questions and adaptations from previous similar Australian studies (Cuatt, 1989; Jennings, 1987; The Monash Medical

School, 1987; Tsai et al., 1988;) and some newly developed questions where others were not available to elicit the information required. The section concerning attitudes to drug use and drug users were selected from a questionnaire designed and tested by Ross and Darke (1992).

The internal consistency of the scale to measure attitudes to injecting drug use and injecting drug users was tested on the results with Chronbach's coefficient alpha of .68 indicating that the scale was moderately reliable. While no other reliability and validity measures were undertaken, the questionnaire was piloted and was examined and approved by the Pharmaceutical Council of Western Australia and The Pharmacy Guild of Australia.

Procedure

Initial Telephone Contact

Using a standardised format (see Appendix C), as previously mentioned,, telephone calls were made to selected pharmacists to inform them of the study and ask them to participate. The importance and value of their participation was expressed and an assurance of confidentiality of information was given. At this time they were also advised that the Pharmaceutical Council of Western Australia and the Pharmacy Guild of Australia approved of the study. In addition, pharmacists' current practice concerning the supply of needles and syringes to injecting drug users was determined. This had two purposes. Firstly, to establish which questionnaire to forward to those willing to participate, and secondly, to ascertain the current supply practice of non-respondents. The calls were made

over a period of four days in the first week of July, 1994. Details of each call were entered onto a prepared form (see Appendix G) to record the outcome.

Mail Out

Once the pharmacists willing to participate were identified ($n = 129$) and their current supply practice determined, a package of material was posted to them.

This consisted of the relevant questionnaire, the cover letter (see Appendix H) and a return addressed reply paid envelope. Each questionnaire was numbered for identification purposes in order to implement follow-up procedures if required.

Cover letter.

The cover letter (see Appendix H) outlined the purpose and significance of the study, the size of the sample and the method of sampling. The importance of the pharmacist's valuable input was emphasised with an assurance of confidentiality. Instructions for completion and return of the questionnaire were included adding that a summary of the findings would be available on request. Telephone numbers were provided for further information if required and pharmacists were thanked for their participation.

When preparing the mail out, the greeting, the return by date (which was designated as approximately two weeks from the date of postage), and the Pharmacy Guild of Australia's survey approval number and rating were handwritten on the cover letter.

Follow-up Telephone Calls

Using standard formats (see Appendixes I and J) two follow-up telephone calls were made to non-respondents, the first approximately two weeks after the due date and the second a further three weeks later. A total of 12 replacement questionnaires were forwarded to subjects, six after each follow-up.

Letters of Appreciation

Letters of appreciation were sent to all respondents informing them of the overwhelming response to the study and thanking them for their participation. Details of the expected availability of the results were given. There was a slight difference in the wording of the letters dependent upon whether the pharmacists required a personal copy of the results (see Appendixes K and L).

Similar letters were also sent to the Director of the National Services Division of the Pharmacy Guild of Australia in Victoria, the President of the Pharmacy Guild of Australia in Western Australia and the Registrar of the Pharmaceutical Council of Western Australia (see Appendixes M, N and O). In these letters, after informing them of the cooperation of pharmacists in responding to the study, and the excellent response rate, appreciation was expressed for the assistance given by the organisation. The expected availability of the results was also provided.

Response Rate

Response to the Initial Telephone Call

Of the sample of 130 pharmacists telephoned 129 (99.2%) consented to receiving a questionnaire. The one refusal was from a country pharmacist who was happy to provide the information that he sells Fitpacks but added that he does not fill in questionnaires. One pharmacist agreed to have a questionnaire although he claimed he did not usually participate in surveys, and probably would not complete and return it; it depended on the content. He also declined to divulge his current selling practice except to say that it changed over time, dependent on the Pharmaceutical Council's recommendation. On these grounds he was forwarded a seller's questionnaire. A number of other issues were raised by pharmacists and these included: one pharmacist advised that he would return the questionnaire providing the questions were not too sensitive; three pharmacists expressed concern that the findings of the research may misrepresent pharmacists' views or misconstrue their feelings about the issues; and the importance of the inclusion of the approval number from the Pharmacy Guild was expressed by one pharmacist. In the main, pharmacists reflected a positive attitude towards the study and a willingness to comply.

Response to the Study

From the 129 questionnaires distributed a total of 117 were returned representing a response rate of 90%. Of these 90 (69%) were returned within the first two weeks, 15 (12%) after the first follow-up telephone call and 12 (9%) after the

final follow-up call. Of the non-respondents ($n = 12$) two claimed to have returned the questionnaire but these were not received; there were three refusals at follow-up from pharmacists who either found the questionnaire too complicated ($\underline{n} = 1$) or too sensitive ($\underline{n} = 2$); and while the other seven agreed to return the questionnaire at the initial telephone call and also agreed at each of the two follow-up calls, they failed to respond. Of the 117 questionnaires returned, 75 were from metropolitan and 42 were from country pharmacists. Of these 115 were included in the analysis, one being discarded due to non-completion and one arriving too late for inclusion. The usable questionnaires represented 88.46% of the sample of 130 pharmacists approached to participate in the study. For a detailed depiction of the response and follow-up see Appendix P.

According to Babbie (1986) a mail survey response rate of 60% is good, with 70% considered very good. However Dillman (1978) claims that with his Total Design Method, for homogenous groups response rates can be expected to exceed 85% for mail surveys. The response rate in the present study is considered particularly good, especially when compared to similar Australian mail surveys. For instance, this included response rates of 37.8% for Mullin's (1990) study of all Victorian community pharmacists, 48% for Cuatt's (1989) survey of all Tasmanian Pharmacy Guild members and 58% for a purposive sample of New South Wales pharmacists (MSJ Keys Young, 1991).

Ethical Considerations

An important ethical consideration of the study was that pharmacists be assured that the information they provide be confidential. As this study in many ways addresses sensitive issues it was important for the pharmacists that their responses remain anonymous. This has been addressed by not requiring names on the questionnaires, which have been identified only by numbers for follow-up purposes. The cover letter explained this procedure to participants and they were assured of confidentiality both in the cover letter and the initial telephone call.

In respect to informed consent the strategy of telephoning the sample of pharmacists before forwarding the questionnaires gave them the opportunity to refuse to participate from the outset. Coercion was not used at any stage and for the few pharmacists who had concerns about the study it was explained that their participation was completely voluntary.

The other dimension of informed consent gained for the study was that of the pharmacists' "gatekeepers" (Homan, 1991, p. 82), the Pharmaceutical Council of Western Australia and the Pharmacy Guild of Australia. One possible explanation for the high response rate was the fact that approval of both organisations had been given for the study. This may have added to the legitimacy and credibility of the research and hence the response rate.

Data Analysis

Although most of the data were precoded, the data from open questions was coded later, after which all data were entered into a Microsoft Excel 4 (1992) spreadsheet which was then converted onto SPSS for Windows 6 (1993) Statistical Package for the Social Sciences for the analysis.

During the analysis the pharmacies were divided into two groups in respect to opening hours (those who opened for nine hours or less per day and those open for more than nine hours) in order to determine those with extended trading hours. They were also grouped in respect to days, so that the number of days open for weekdays and weekend days could be ascertained. These measures were taken to determine whether there were any differences between selling practice in terms of trading hours. In addition the positive questions in the Likert scale regarding pharmacists' attitudes to injecting drug use and injecting drug users were reverse coded so that the point values of the negative and positive responses were correctly calculated. As previously mentioned Chronbach's alpha was also calculated on the results of this scale to test for internal consistency.

Frequencies and summary statistics; to discover the mean, standard deviation and the range of scores, were calculated. These were used to describe the characteristics of the sample, determine the extent to which pharmacists currently sell needles and syringes to injecting drug users and determine the factors that have influenced changes in supply practices over time.

Additionally, calculation was conducted to determine the factors that differentiated between current sellers and nonsellers. It was found that on the dependent variable the groups were of a very uneven size and in some categories there were a very small number of responses. This made the use of *t* tests inappropriate. Moreover, some of the chi square analyses were unable to be conducted because of insufficient cell size. Therefore, as there were a large number of variables likely to influence supply practice, to discover the relationships between the variables interval variables were left as they were, nominal variables such as practice and gender were dummy coded as 0 and 1 (Hills, 1994) and the independent variables were correlated with the dependent variable. Pearson's *r* was calculated, an alpha level of .05 was set and degrees of freedom were set at 113.

CHAPTER FOUR

Results

Sample Characteristics

From the total of 115 useable questionnaires received the participants in the study consisted of 94 males and 21 females. The age range of participants was from 21 to 64 with an average age of 42.36 ($SD = 10.56$). Sixty four percent of pharmacists were from the metropolitan region and 36% were from the country. There was a 43 year span between the time participants registered as pharmacists ranging from 1951 to 1994. The average time registered was 20.42 years ($SD = 10.57$). All participants had been working as pharmacists since registration with the years of experience as a pharmacist ranging from 1 to 43 years ($M = 20.42$, $SD = 10.57$). The length of time pharmacists had worked in the present pharmacy ranged from 3½ months to 35 years, an average of 8.41 years ($SD = 7.78$).

The most common location of pharmacies was in strip type shopping (37%), followed by neighbourhood shops (30%), regional shopping centres (14%), medical centres (9%), Central Business District (5%) and isolated locations (4%). The number of equivalent full time staff employed at pharmacies ranged from none to 16 with a mean of 3.4 ($SD = 2.99$). From a range of options, of which

more than one could be selected, respondents were asked to indicate the largest customer groups in their pharmacy. The results revealed that elderly people were among the largest group of customers for 68% of pharmacists, young families followed for 57%, unemployed - 49%, professional/office workers - 20%, passing trade - 19%, students - 7% and "alternatives" for 4%. Other customer groups mentioned, each by 3% of pharmacists, were farmers, miners and rural workers.

Details of the opening hours and the percentage of pharmacies open on specific days and times are presented in Table 2. Monday, Tuesday, Wednesday and Friday hours which were very similar have been averaged and presented together. Thursday, Saturday and Sunday hours are presented independently. There was a wide range of opening hours of pharmacies with more than half (55%) opening

Table 2

Pharmacy opening hours

Days	% Pharmacies			Hours open		
	<= 9 hours	> 9 hours	Not open	Range	<u>M</u>	<u>SD</u>
Mon, Tue, Wed & Fri ^a	45	55	0	3.5 - 16	9.87	1.76
Thursday	28	72	0	3.5 - 16	10.59	2.12
Saturday	76	22	2	3 - 16	7.16	3.47
Sunday	11	17	72	2 - 16	9.98	3.72

Note. Six cases missing, (n = 109).

^a Mean percentage over the four days.

more than nine hours during the week except Thursdays with 72%. Only 2% of pharmacists did not open at all on Saturday with 22% opening extended hours. A total of 28% opened on Sunday with 17% opening for extended hours. The range of hours open differs between weekdays and each weekend day with the widest range being 2 to 16 hours on Sundays. Six pharmacists were not included in this analysis because they either did not respond to the question or gave invalid answers.

The Extent to Which Pharmacists Currently Supply Needles and Syringes to Injecting Drug Users

The study revealed that of the 115 pharmacists who participated in the study 88% ($n = 101$) currently sell needles and syringes to injecting drug users. The same proportion of sellers was achieved at the initial telephone contact when the total sample of pharmacists ($N = 130$) were asked whether they currently sold needles and syringes to injecting drug users, indicating that there was no difference between respondents and nonrespondents in regard to selling practice. Of the 12% ($n = 14$) of nonselling pharmacists 9 were past sellers who had previously sold needles and syringes to injecting drug users but had reversed their decision to sell, and 5 had never sold. As there was a small proportion of both past sellers (8%) and pharmacists who had never sold (4%) both were combined into the nonsellers' category for the analysis except where specified.

A breakdown of the figures revealed that 86% ($n = 64$) of pharmacists from the

metropolitan region and 90% ($n = 37$) of pharmacists from the country were current sellers. Nonsellers included 10 metropolitan (71%) and 4 country (29%) pharmacists. Table 3 shows the supply practice of participants by location with metropolitan and country current sellers making up 56% and 32% respectively of the total participants in the study.

Table 3

Supply practice of participants by location

Supply Practice	Participants		
	Metro	Country	Total
	$n(\%)$	$n(\%)$	$n(\%)$
Current Sellers	64(56)	37(32)	101(88)
Nonsellers	10(9)	4(3)	14(12)
Total	74(64)	41(36)	115(100)

Injecting Equipment Sold

Pharmacists sell sterile injecting equipment in a number of forms and various quantities. Ninety seven percent ($n = 98$) of current sellers sell Fitpacks, with the number sold ranging from 0 to 100 per week with an average of 17.24 ($SD = 50.62$). Single needles and syringes are sold by 22 pharmacists (22%) ranging from 0 to 200 per week with a mean of 38.89 ($SD = 50.62$). Three current sellers

(3%) indicated that they sell needles and syringes to injecting drug users in insulin packs of 10. Fitpacks are sold at prices ranging between \$3.00 and \$5.95 with an average price of \$4.05 each (SD = 58 cents). Single needles ranged in price from 20 cents to \$1.00 each (\bar{M} = 57 cents, SD = 23 cents) with insulin packs between \$3.95 and \$5.00.

Pharmacy Policy

Overall 77% of pharmacists (\bar{n} = 88) indicated that they had a policy concerning the supply of needles and syringes to injecting drug users. This included 75% of current sellers (\bar{n} = 76) and 86% of nonsellers (\bar{n} = 12). The main points of the policies were coded into categories and are summarised in Table 4. Some

Table 4

Main points of pharmacy policy regarding the sale of N&S to IDUs

Main points	n(%)
Sell only Fitpacks	50(43)
Sell on request	18(16)
Don't sell N&S to IDUs	12(10)
Sell without judgement	7(6)
Pharmacist's authorisation required	6(5)
Sell Fitpacks and singles	3(3)
Other	16(14)

Note. N&S needles and syringes. IDUs = injecting drug users.

pharmacists listed a number of points to their policies. The most common policy was to 'sell Fitpacks only', followed by 'sell on request'. The nonsellers all had only the one policy of not selling to injecting drug users.

Factors That Have Influenced Changes in Supply Practice Over Time

Current Sellers

Before reporting the factors influencing changes in supply practice, it is important to note when pharmacists started to supply needles and syringes to injecting drug users. Of the 101 pharmacists who sell needles and syringes to injecting drug users 8% ($n = 8$) did not indicate when they began to supply and a further 8% did not know or were unsure. As there were 16 missing cases percentages were based on the 85 pharmacists who did specify when supply began in their pharmacies.

The results showed that pharmacists began supplying needles and syringes to injecting drug users in 1980 (before the advent of AIDS) when 2 pharmacists adopted the practice (see Table 5). However, taking up the practice was sporadic in the early 1980s. By July 1987, when government initiatives concerning the supply of sterile injecting equipment as a preventive measure in the spread of HIV were implemented, a further 6 pharmacists were selling to injecting drug users. One pharmacist who began supplying in 1987 did not stipulate the month started so it is not known whether he or she began supplying before or after the government initiatives were implemented. Since 1987 the number of suppliers has

Table 5**Year pharmacists began supply
of N&S to IDUs**

<u>Year</u>	<u>n(%)</u>
1980	2(2)
1984	2(2)
1985	3(4)
1987	5(6)
1988	9(11)
1989	11(13)
1990	16(19)
1991	9(11)
1992	16(19)
1993	9(11)
1994 ^a	3(4)
Total	85(102) ^b

Note. Only 85 valid answers received for this variable.

^a To July 1994. ^b Percentages do not add to 100 due to rounding.

been steadily increasing with an average of 12 pharmacies adopting the practice each year from 1988 to 1993, with a range of 9 to 16 per year. The most recent time a pharmacist began supplying needles and syringes to injecting drug users was April 1994. The 1994 figures are to July of that year when the survey was conducted.

Factors influencing the change.

When asked to rate the degree of importance of a number of factors in determining their decision to start selling needles and syringes, the vast majority of current sellers (92%) rated as important or very important that they became more convinced that the supply of injecting equipment was essential to the reduction of transmission of disease (see Figure 1). The belief that disruption was unlikely to occur in their pharmacy was important or very important to almost half (48%) of selling pharmacists. In regards to the law, 40% of current sellers' decision to supply was influenced by the fact that no prosecutions had been laid for selling needles and syringes to injecting drug users and 25% rated the impending legislative change as important or very important. Only 9% saw it as an important commercial decision. A number of other reasons were given, the most frequent ($n = 5$) being response to the Health Department of Western Australia's initiatives and/or the Pharmaceutical Council's recommendations. Other reasons reported by a small number of individual pharmacists included: refusal to supply attracted abuse, threats and general intimidation; the possible reduction of burglaries; the hope that used syringes would be properly disposed of; as a community service; and because customers asked for them. For one pharmacist the decision was influenced by more personal considerations for he/she stated that "if the person carrying HIV transmitted it to my child and it could have been prevented I could not 'forgive myself' so this was a semi-personal decision".

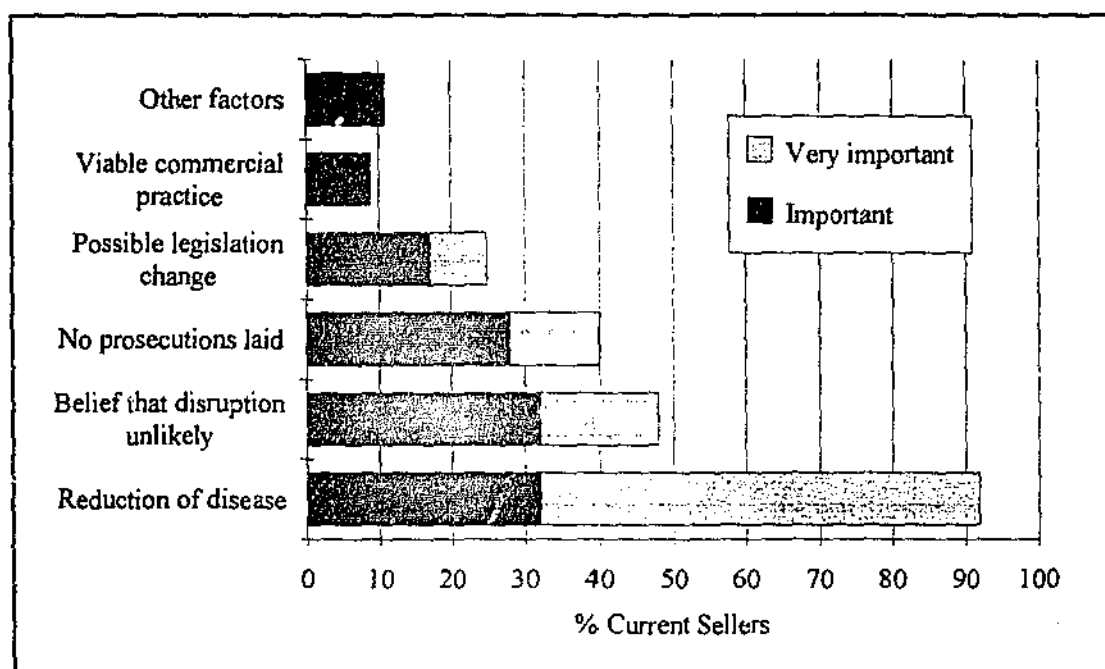


Figure 1. Factors influencing current sellers' decision to sell needles and syringes to injecting drug users.

Future intentions.

Of the 101 current sellers 93% ($n = 94$) intend to continue selling needles and syringes to injecting drug users, 2% ($n = 2$) indicated they did not intend to continue selling, 2% were ambivalent about continuing the practice and 3% ($n = 3$) failed to indicate their future intentions. One metropolitan pharmacist's explanation for discontinuing sales was that he was waiting until the new legislation was sorted out as the Pharmacy Guild was still figuring out what could be sold by pharmacists without paperwork hassles. The other current seller's reason for ceasing sales, a country pharmacist, was because of the requirement for data collection and the time required, together with no training being provided. For one pharmacist ambivalent about his future selling practice, the indiscriminate disposal of needles and syringes and the drug users' apparent lack of respect for themselves and the community caused concern. However, at various times he felt that, as a community pharmacist, he was the best equipped person to handle the distribution of needles and syringes. The other ambivalent pharmacist felt there was possibly enough outlets for users to purchase syringes.

Past sellers

As reported earlier 9 (64%) of the 14 nonsellers had previously sold needles and syringes to injecting drug users but had discontinued the practice. Of these past sellers three stopped supplying needles and syringes to injecting drug users in 1990, 3 stopped in 1993 and 2 stopped selling in 1994. One pharmacist failed to indicate when he/she stopped selling.

Factors influencing the discontinuation of supply.

Important factors in pharmacists' ($n = 9$) decision to stop selling needles and syringes to injecting drug users are shown in Figure 2. The factors most often reported as important or very important in their decision to stop supply was disruption in their pharmacy by 89% ($n = 8$) of past sellers followed by incidents that threatened the safety of staff and/or other customers by 78% ($n = 7$) and ethical concerns about the practice by 55% ($n = 5$). Less than half reported shoplifting, community attitudes to the practice and the legal ramifications as factors in their decision to stop selling. Other factors important to the decision of past sellers to stop supply included: the incidence of indiscriminate disposal of needles and syringes, reported by 2 pharmacists; concern about possible cancellation of shop insurance due to the number of break-ins experienced, as well as the disruption to the pharmacist's home life as a result of call-outs in one case; and the belief by one pharmacist that supplying needles and syringes would not reduce the spread of HIV because two or three "users" would come into the pharmacy at a time and buy a single needle/syringe.

Future intentions.

Thirteen nonsellers (93%) indicated that they did not intend selling needles and syringes to injecting drug users in the future. Nine pharmacists (64%) said that nothing would encourage them to sell injecting equipment to injecting drug users. However, three (14%) reported that if there was evidence that drug users were receiving counselling or rehabilitation to change their drug use they would sell to

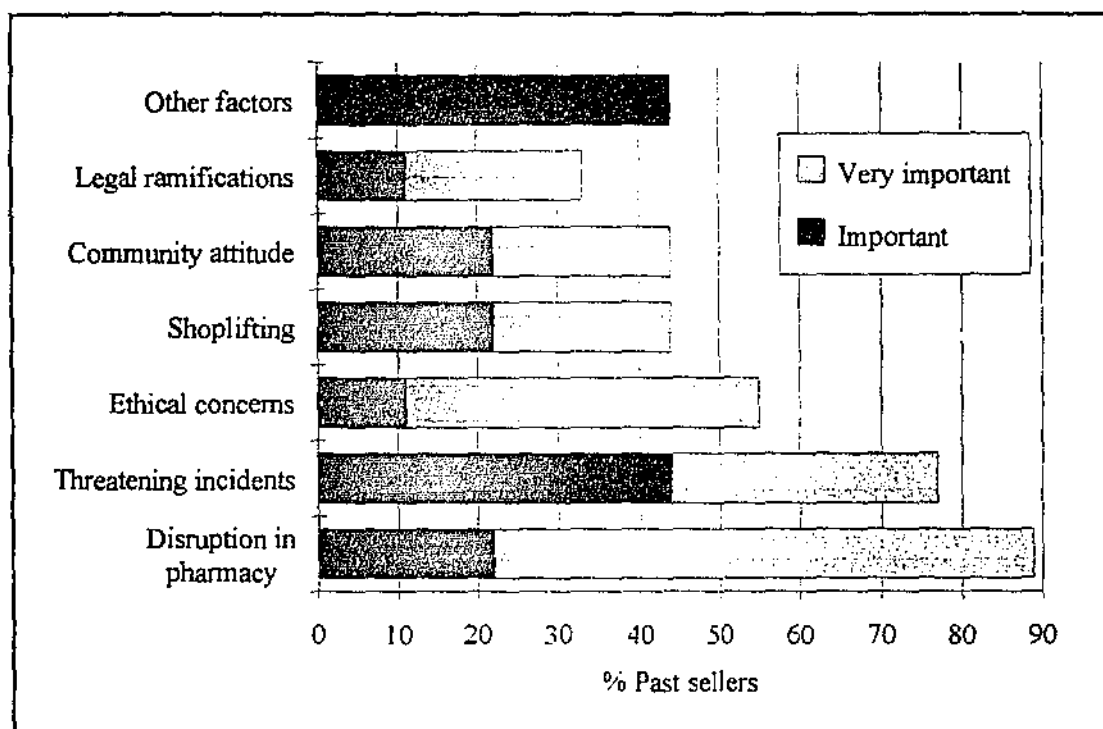


Figure 2. Factors influencing past sellers' decision to stop selling needles and syringes to injecting drug users.

them, one pharmacist would sell if he "thought there was a way of cutting down on the problem" and one pharmacist said he would sell if drug users appeared. It is interesting that disruption and threats were a major reason for discontinuing sales but guarantees of safety did not feature here.

Factors that Differentiate Between Current Sellers and Nonsellers of Needles and Syringes to Injecting Drug Users

To determine the factors that differentiate between sellers and non-sellers of needles and syringes to injecting drug users variables likely to impact on practice were correlated with current practice (see Table 6). The results reveal a relationship between a number of variables and current selling practice indicating possible factors that influence pharmacists' decision about supplying sterile injecting equipment. These factors are as follows:

1. Current sellers are slightly more likely than nonsellers to regard the HIV virus as a serious health risk to injecting drug users, $r(113) = .19, p < .05$.
2. Current sellers are more likely to think the use of non-sterile injecting equipment is a hazard to injecting drug users, $r(113) = .30, p < .01$.
3. In relation to the role pharmacists should play concerning HIV and hepatitis current sellers are more likely to think pharmacies should sell needles and syringes to injecting drug users, $r(113) = .67, p < .01$.
4. Current sellers are more likely to think that injecting drug users should obtain needles and syringes from pharmacies, $r(113) = .65, p < .01$.

Table 6**Correlation between selling practice and possible influencing factors**

Factors	<u>r</u>
Seriousness of HIV to the general public	.08
Seriousness of HIV to IDUs	.19*
Seriousness of hepatitis C to the general public	.04
Seriousness of hepatitis C to IDUs	.16
Significance of hazard of injecting drug use to the general public	.05
Significance of hazard of injecting use to IDUs	.30**
Pharmacists should sell needles and syringes	.67**
IDUs should obtain needles and syringes from pharmacies	.65**
IDUs should pay for needles and syringes	.26**
Support of WA Health Departments strategy	.05
Disruptive incidents in pharmacy	-.37**
Dispense methadone	.05
Current legal status of needle and syringe supply	-.12
Attitude to injecting drug use and IDUs	.02
Year of registration	-.07
Experience as pharmacist	.08
Time in present pharmacy	.09
Age	.11
Gender	-.09
Number of staff	.12
Location of pharmacy	.06
Mean hours open weekdays	.07
Mean hours open weekends	.09
Unemployed customers	.20*
Student customers	.09
Elderly customers	-.06
Young families as customer group	.09
Region	.05

Note. IDUs = Injecting drug users.

* $p < .05$. ** $p < .01$.

5. Current sellers are more likely to think that injecting drug users should pay for needles and syringes, $r(113) = .26, p < .01$.

6. Nonsellers are more likely to report disruptive incidents in their pharmacy concerning injecting drug users, $r(113) = -.37, p < .01$.

7. Current sellers are more likely to indicate unemployed as a large customer group, $r(113) = .20, p < .05$.

Other variables tested revealed no significant relationship to supply practice.

While these results reveal the significant factors differentiating between current sellers and nonsellers, a more detailed description of the findings of particular interest are presented in the following section.

Health Risk of HIV and Hepatitis C

Overall 99% of pharmacists view HIV as a serious or very serious health risk to injecting drug users and 81% think it is a serious or very serious risk to the general public. In comparison hepatitis C is viewed as serious or very serious to injecting drug users by slightly fewer pharmacists with 93%, though more strikingly, only 68% view hepatitis C as a serious or very serious health risk for the general public. Figures 3 and 4 show the degree of seriousness with which current sellers and nonsellers view these blood-borne viruses. As would be expected the data indicates that both current sellers and nonsellers believe that these viruses are both more serious for injecting drug users than for the general

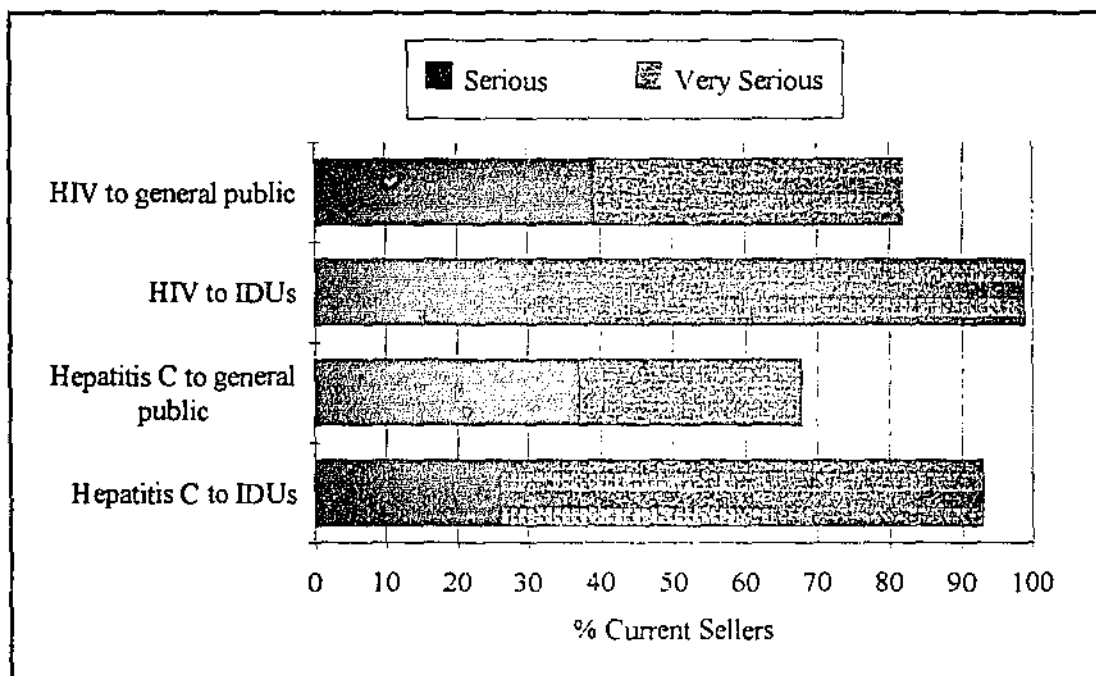


Figure 3. Current sellers view of the seriousness of HIV and hepatitis C to the general public and to injecting drug users.

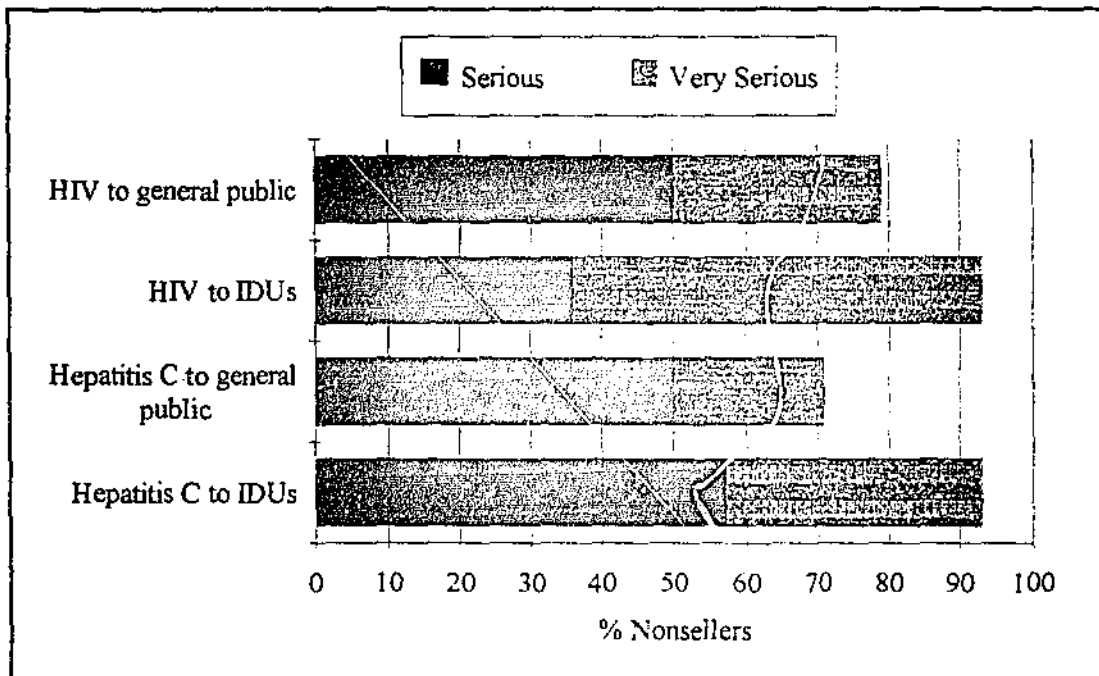


Figure 4. Nonsellers' view of the seriousness of HIV and hepatitis C to the general public and to injecting drug users.

public. The only significant difference between current sellers and nonsellers among variables in this group was that current sellers were slightly more likely to regard HIV as a serious risk to injecting drug users, as previously shown.

Health Hazard of Non-sterile Injecting Equipment

Almost all pharmacists (98%) consider the use of non-sterile injecting equipment as a significant or very significant health hazard to injecting drug users and 73% consider it a significant or very significant health hazard to the general public. In Figures 5 and 6 the degree of significance current sellers and nonsellers place on the use of non-sterile injecting equipment to these groups is shown. For injecting drug users 99% of current sellers and 85% of nonsellers viewed the use of non-sterile injecting equipment as a significant or very significant health hazard. This finding was significant and indicated that current sellers were somewhat more likely to think injecting drug users were at risk with the use of non-sterile injecting equipment.

Training

Only six pharmacists (5%), all of whom were current sellers, reported receiving any training regarding the sale of needles and syringes to injecting drug users. Of these, two indicated they received training through the Pharmaceutical Council, two by the Western Australian Alcohol and Drug Authority and one by the Health Department of Western Australia. One pharmacist had twice received training, firstly at Boots Pharmacies in London in 1976 and more recently in

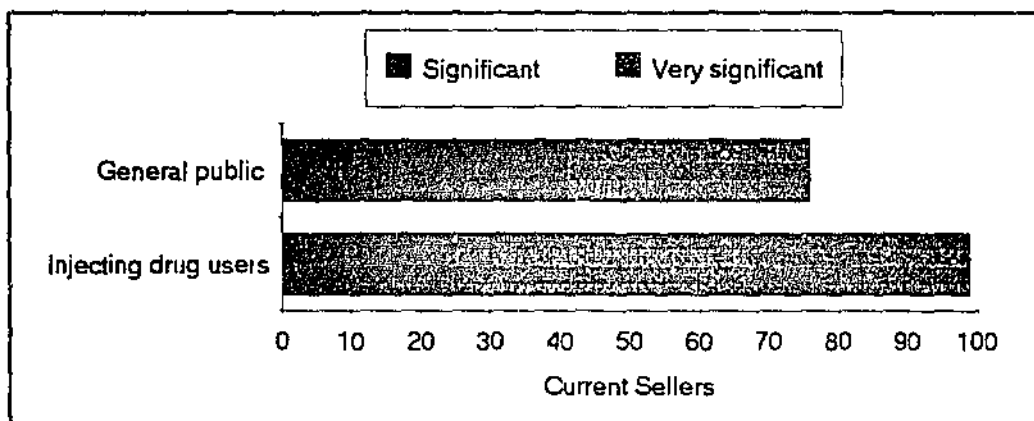


Figure 5. Current sellers' view of how significant a health hazard the use of non-sterile injecting equipment is to the general public and to injecting drug users.

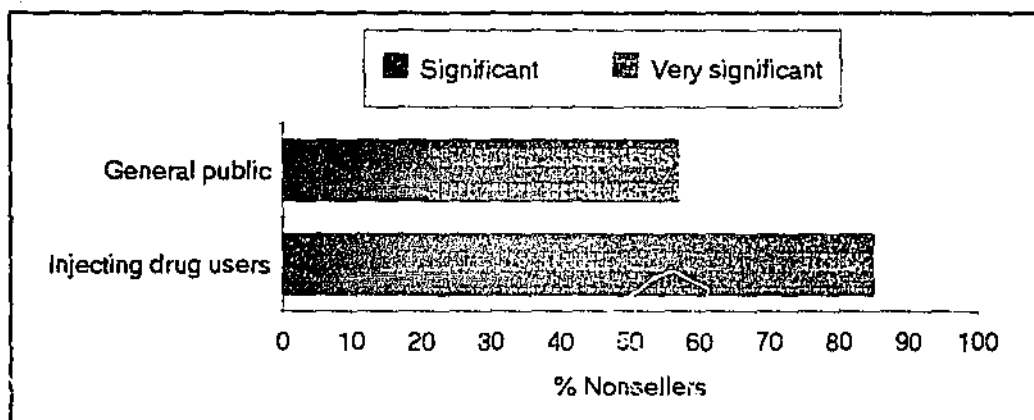


Figure 6. Nonsellers' view of how significant a health hazard the use of non-sterile injecting equipment is to the general public and to injecting drug users.

Western Australia, although the body conducting the later training was not specified. Five pharmacists had training in 1990 and one in 1992. No statistical analysis was conducted concerning training due to the small number of cases.

Support of the Health Department of Western Australia's Harm

Minimisation Strategy

Of the 112 pharmacists who responded to this question 82% ($n = 92$), comprising 89% ($n = 90$) of current sellers and 14% ($n = 2$) of nonsellers indicated that they support the Health Department of Western Australia's strategy to sell needles and syringes to injecting drug users for harm minimisation reasons. Ten percent ($n = 10$) of current sellers do not support the strategy, yet still supply needles and syringes. Conversely, 14% ($n = 2$) of nonsellers do support the strategy. There is some difficulty in interpreting this data. While these figures may accurately represent pharmacists' stance on this issue it is possible that the use of the word 'support' in the question may have resulted in some ambiguity among pharmacists. It could be that some pharmacists interpreted support as meaning selling. They may also not agree with the strategy as a whole, but support the supply of injecting equipment by pharmacists. For this reason, if the study were to be repeated, the question could be reworded to ensure a clear understanding.

Disruptive Incidents

A total of 37 pharmacists (32%) overall have experienced disruptive incidents concerning injecting drug users in their pharmacies. This included the majority of

nonsellers (71%, $n = 10$) with a further two not responding to this question, and 27% ($n = 27$) of current sellers. As previously noted this was a significant difference between current sellers and nonsellers.

The types of incidents experienced by pharmacists were coded into four categories with the results presented in Table 7. Of the 37 pharmacists who experienced disruptive incidents 81% specified the nature of these incidents. Some pharmacists have experienced multiple disruptive incidents but each type of incident is accounted for only once for each respondent. Where a pharmacist experienced more than one type of incident they were counted in each appropriate category.

Table 7

Disruptive incidents experienced by pharmacists

	Current Sellers ($n = 101$)	Nonsellers ($n = 14$)
Type of Incident	$n(\%)$	$n(\%)$
Aggression/Abuse	17(17)	6(43)
Theft	2(2)	4(29)
Demands for attention	1(1)	2(14)
Disoriented/intoxicated customers	5(5)	1(7)

The most common problem experienced was aggression and/or abuse to the pharmacist and/or staff which was experienced by 43% of nonsellers and 17% of current sellers. Aggression and abuse ranged from complaints to rudeness, swearing, arguments, threats and violent behaviour, and was usually in regard to either the cost of Fitpacks, temporary unavailability of Fitpacks, refusal to sell single needles and syringes, refusal to sell other drugs, or the pharmacy's policy not to supply injecting equipment to injecting drug users. In four cases the abuse was associated with the drug affected condition of the customer and their impatience and demands for immediate attention.

The second most common incident was theft which was experienced by 4 nonsellers (29%) and 2 sellers (2%). Four of these cases were shoplifting, one nonselling pharmacist had experienced various hold-ups and robberies and another had his pharmacy broken into three times and each time the only things stolen were syringes and Fitpacks. Other incidents arose from demands for immediate attention in 3 cases, and disoriented or intoxicated customers in 6 cases. Two pharmacists expressed concern about the effects of disoriented or intoxicated drug users on other customers.

Further statistical analysis to determine whether aggression/abuse was the major difference between current sellers and nonsellers was not conducted as expected frequency of at least 5 in each cell is required to do a chi-square test so cell sizes were too small.

Handling of disruptive incidents.

Of the 37 pharmacists who experienced disruptive incidents 83% ($n = 31$) indicated how they handled the incidents, the results of which were coded into four categories and are summarised in Table 8. Verbal conciliation was the most often used strategy and was adopted by 30% of this group of pharmacists including 36% of current sellers and 15% of nonsellers. A further 19% asked or told the customer to leave or go elsewhere. Of the pharmacists in the "other" category 2 current sellers and 1 nonseller ignored the incidents, 2 current sellers called the police, 1 current seller claimed they did not handle the incident well,

Table 8

Strategies used by pharmacists experiencing disruptive incidents

	Current Sellers ($n = 25$)	Nonsellers ($n = 13$)	Total ($n = 37$)
Strategy	$n(\%)$	$n(\%)$	$n(\%)$
Verbal conciliation	9(36)	2(15)	11(30)
Asked person to leave	6(24)	1(8)	7(19)
Served quickly	2(8)	3(23)	5(13)
Other	6(24)	2(16)	8(22)
Total	23(85)	8(80)	31(84)

Note. Six pharmacists did not indicate how they handled disruptive incidents.

one current seller physically fought the drug users off and one said he/she handled incidents with a great deal of problem and claimed there is no support for pharmacists.

Other Problems

Current sellers were also asked whether they had experienced any or any other problems in their pharmacy as a result of selling needles and syringes to injecting drug users. Sixteen percent ($n = 16$) reported other problems. Of these, 8 reported theft which included shoplifting in six cases, one break-in and a number of burglaries experienced by one pharmacist. Requests for single needles resulted in problems for four pharmacists who had a 'Fitpack only' policy with two of the pharmacists reporting abuse. Other problems experienced by individual pharmacists included: unhappy parents who discovered children using syringes they had purchased at the pharmacist's store; 'undesirables' tending to be off-putting to other customers and lowering the image of the pharmacy; regular customers being 'appalled' to see needles and syringes being sold to injecting drug users; injecting drug users trying to gain credit or unauthorised prescriptions; and one country pharmacist reported police enquiries (anonymous, no names requested) of usage, sales times and amounts.

Many of the problems experienced by pharmacists were of the same type as those reported as disruptive incidents previously, indicating a difference in the way pharmacists categorised the incident or problem. This means that the comparison

between current sellers and nonsellers regarding disruptive incidents is possibly not correct due to the different perception of the incident. If the study were to be repeated some modification of the questionnaire would be needed in this area to avoid this confusion.

Current Legal Status of Needle and Syringe Supply to Injecting Drug Users

When asked the current legal status regarding the sale of needles and syringes to injecting drug users 60% ($n = 69$) of pharmacists indicated that the practice was legal, 17% ($n = 20$) of whom qualified this by adding that approval was required (see Table 9). Six percent ($n = 7$) of pharmacists, all current sellers, reported that the practice was illegal. One third of pharmacists either did not know or were unsure of the current legal status, gave invalid answers or failed to respond to the question. One possible explanation for this mixed response could be that the new legal status was causing some uncertainty for pharmacists.

To conduct the correlation analysis between sellers and nonsellers this variable was re-coded into three groups including legal (consisting of the legal and legal with approval categories), illegal and missing (consisting of the don't know/unsure, invalid and missing categories). As reported previously there was no significant difference between current sellers and nonsellers on these results.

Influence of the current legal status.

When asked how the current legal status influenced their practice regarding the

Table 9**Pharmacists' view of the current legal status of needle and syringe supply to IDUs**

	Current Sellers	Nonsellers	Total
Legal status	n(%)	n(%)	n(%)
Legal	45(45)	4(29)	49(43)
Legal with approval	16(16)	4(29)	20(17)
Illegal	7(7)	0(0)	7(0)
Don't know/unsure	12(12)	2(14)	14(12)
Invalid	4(4)	0(0)	4(3)
Missing	17(17)	4(29)	21(18)
Total	101(100)	14(101) ^a	115(99) ^a

Note. IDUs = injecting drug users.

^a Percentages do not add to 100 due to rounding.

sale of needles and syringes to injecting drug users of the 63% ($n = 72$) of pharmacists who gave valid answers 84% ($n = 53$) of current sellers and 100% ($n = 9$) of nonsellers indicated it did not influence their practice. Other answers received were dependent on the response to the previous question.

Attitudes to injecting drug use and injecting drug users

As outlined in Chapter 3 the positive statements on the scale measuring pharmacists' attitudes to injecting drug use and injecting drug users were re-coded

and the internal consistency of the scale was tested with a coefficient alpha of .68 indicating that the scale is moderately reliable.

Pharmacists average scores on the 10 questions of the scale ranged from 1.3 to 4.2 with a mean of 2.74 ($SD = .51$). These figures reveal that on average pharmacists are slightly negative in their attitude to injecting drug use and injecting drug users. As already shown, there was no difference between current sellers and nonsellers for this variable indicating that supply practice was not influenced by pharmacists attitudes to injecting drug use and injecting drug users as measured by this scale.

Nonsellers' Current Reasons for not Selling

Figure 7 depicts the degree of importance nonsellers place on a number of factors in determining their current decision for not selling needles and syringes to injecting drug users. The factor rated by almost all nonsellers (93%) as important or very important was concern about possible aggression towards staff of the pharmacy. Almost three quarters (71%) did not want the type of people who use drugs coming into their pharmacy. For 21% the current legislation and

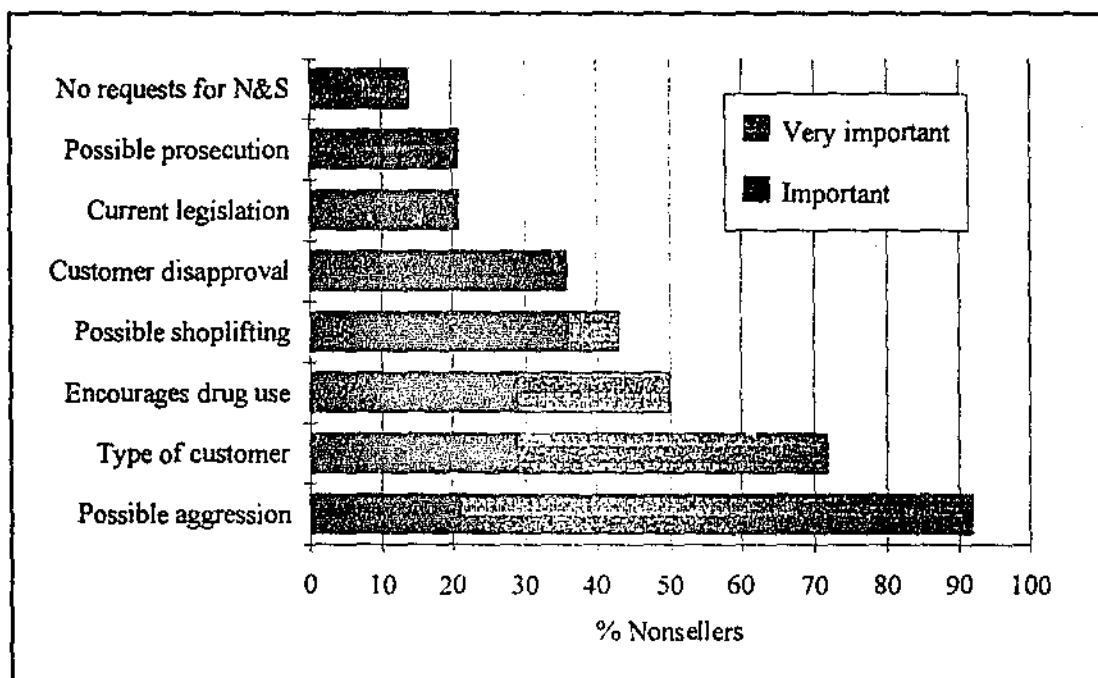


Figure 7. Factors influencing nonsellers' current decision not to sell needles and syringes to injecting drug users.

possible prosecution was of concern indicating that these pharmacists were probably unaware of the change in legislation.

Other Issues

Almost a third of pharmacists (31%) added comments expressing a wide range of opinions concerning the issue of the provision of needles and syringes to injecting drug users. The only issue mentioned by more than 3% of pharmacists regarded counselling or treatment for injecting drug users which 9% ($n = 10$) of pharmacists alluded to.

CHAPTER FIVE

Discussion

The Extent of Current Needle and Syringe Supply

The findings of this study indicate that the vast majority of pharmacists in Western Australia have adopted the practice of selling needles and syringes to injecting drug users. The finding that 88% of Western Australian pharmacists are currently supplying sterile injecting equipment exceeds the former approximation of 78% (Kerry,1994) of pharmacists who sell Fitpacks. As only 3% of suppliers do not supply Fitpacks, this is not enough to account for the difference. This difference may be due to sampling bias or, as Kerry's figures were obtained from order forms for Fitpacks it could be that some pharmacists sold very few Fitpacks, did not often re-order and were thus incorrectly counted as nonsuppliers. This was the experience of Greig (1992) who found that many pharmacists contacted who were thought to be nonparticipants in the Fitpack program because they were not on the re-order lists, had every intention of participating but were not yet ready to re-order. The proportion of sellers in the current study is closer to the 86% achieved in the telephone survey conducted by Greig in 1992. Greig's sampling procedure, however, differed in that a non-randomised selection process was adopted in an unsuccessful attempt to obtain a discrete number of current sellers,

nonsellers and past sellers.

An unexpected result in the current study is that a higher proportion of country pharmacists (90%) supply needles and syringes to injecting drug users than do metropolitan pharmacists (86%), although this difference was not statistically significant. However, the proportion of country pharmacists currently supplying represents a vast increase since 1990 when Swensen, Westlund and Baker (1990) found that according to re-order forms, 25% were providing needles and syringes through the SS5 Pack program. At that time 56% of metropolitan pharmacists, more than double the proportion of those from the country, were involved in the supply of SS5 Packs. These figures may indicate that pharmacists throughout the state have responded to the call to help prevent serious blood-borne diseases and are playing an important role in the government's harm minimisation strategy although the points noted above should caution this interpretation.

Although increasing numbers of pharmacists have adopted the practice of selling needles and syringes to injecting drug users 8% were past sellers who had reversed their decision to sell. This is a higher proportion than the 3% of past sellers (when taking into account that two respondents still sold single needles) in Greig's (1992) evaluation of the Fitpack program. However, the figure compares more favourably with Mullin's (1990) Victorian study where 14% of respondents were past sellers and 59% current sellers, although only a 37.8% response rate was achieved by Mullins so there was less chance of the findings being

representative of the total population. In earlier Victorian studies 5% (Jennings, 1987) and 8.5% (Monash Medical School, 1987) of participants were past sellers and these too had a smaller proportion of current sellers (63% and 45% respectively) in comparison to Western Australia with 88%. These figures indicate that less pharmacists cease supply in Western Australia.

Factors Influencing Changes to Supply Practice.

The most compelling factor that encouraged pharmacists to sell needles and syringes to injecting drug users was their belief that the supply of sterile injecting equipment was essential for the reduction of the transmission of disease. It is clear that the implications of the use of non-sterile injecting equipment by persons injecting illicit drugs is regarded seriously by pharmacists. While only five participants specifically mentioned that their decision to sell was influenced by the Health Department of Western Australia's and/or the Pharmaceutical Council's recommendations, it is clear that the encouragement from these bodies and education about the seriousness of the problem has influenced the participation in needle and syringe sales in Western Australia.

These findings were similar to the experience of other states. For example, Tsai, Goh Webeck and Mullins (1987) reported a significant favourable shift in pharmacists' attitudes towards selling in New South Wales after the public launch of the Anti-AIDs Kit in 1986. In Victoria the Monash Medical School (1987) reported that many of the current sellers commented that they had adopted the

practice in response to the policy guidelines of the Pharmaceutical Society.

Moreover, the implications from other studies were that because the majority of pharmacists acknowledged HIV as a serious risk to injecting drug users the sale of injecting equipment was taken up (Jennings, 1977; Cuatt, 1989).

The other important factor that influenced many current sellers (48%) in this study was that disruption was unlikely to occur. However the results show that one third of pharmacists in the study have experienced such incidents and for past sellers, disruption in the pharmacy and threatening incidents were the two commonest factors influencing the discontinuation of supply. This was similar to the findings in Greig's (1992) earlier studies which found that the major cause for pharmacists ceasing to participate in Fitpack sales were fear of further assault, break-ins and theft. Pharmacists used a range of strategies to handle disruptive incidents, the commonest being verbal conciliation. However, a number had difficulties and either ignored the incidents or used stronger measures. Only a small minority of pharmacists have received any training in regard to selling needles and syringes and it may be that this needs to be rectified.

Future Intentions

It is clear that the vast majority of pharmacists intend to continue to supply needles and syringes to injecting drug users. However, there are some who indicated that they may change their mind about selling practice. For example, two sellers in the current study indicated that they intended to discontinue sales

and another two were ambivalent about their selling practice. On the other hand one of the nonsellers intended to sell on request and, although the other nonsellers said they did not intend selling in the future, four qualified this by stating the grounds that would encourage them to do so. There may therefore be some slight fluctuation in selling practice but it seems unlikely that all pharmacists will participate.

Factors That Differentiate Current Sellers from Nonsellers

There was little surprise in some of the results regarding the significant factors that differentiated current sellers from nonsellers. That current sellers are more likely to think that pharmacists should sell needles and syringes to help prevent HIV and hepatitis C and injecting drug users should obtain needles and syringes from pharmacies, and pay for them, is self explanatory. In terms of demographics there were no differences between sellers and nonsellers except for the finding that unemployed people were slightly more likely to be customers in current sellers' pharmacies, though the relationship between these factors is unclear.

In addition, current sellers were more likely than nonsellers to believe both that HIV was a serious health risk to injecting drug users and that the hazard posed by the use of non-sterile injecting equipment was serious to injecting drug users. However interpretation of these findings is a little difficult as the majority of nonsellers were past sellers.

Disruptive Incidents in the Pharmacy

Possibly the most important factor differentiated between sellers and nonsellers was that nonsellers (71%) were more likely than current sellers (27%) to have experienced disruptive incidents in their pharmacy. This is reflected in the finding that disruption in the pharmacy and incidents that threatened staff or other customers were factors in the cessation of needle and syringe supply for the majority of past sellers. Overall, aggression and/or abuse were the most common incident experienced by pharmacists and for nonsellers the possibility of aggression is the commonest factor influencing their current reason for not selling. It appears that support and/or training (previously alluded to) for pharmacists to help deal with these incidents may be an option to consider.

HIV and Hepatitis C

Although the majority of pharmacists overall view HIV and hepatitis C as a serious health risk to both the general public and injecting drug users, hepatitis C is considered to be less of a risk than HIV for both groups, and while 93% of both current and nonsellers think hepatitis C is a serious risk for injecting drug users, more current sellers view it as very serious. These findings somewhat belie the current information on the prevalence of these diseases and their transmission. Hepatitis C is at least five times more prevalent in Australia than HIV with at least 15 times more new infections of hepatitis C each year (Wodak & Crofts, 1993). Moreover the incidence of hepatitis C among injecting drug users is extremely high with 80% to 90% of clients in the Perth methadone clinic infected

with the virus (Kerry, 1994). Therefore transmission through the sharing of non-sterile injecting equipment is highly probable.

One possible explanation for Western Australian pharmacists viewing hepatitis C as a less serious health risk than HIV is that it is a more recently recognised disease than HIV and has not been focused on to the same degree. Less education regarding the disease has been forthcoming and this may need to be addressed. On the other hand the result may be due to interpretation. It could be that pharmacists considered the seriousness of the diseases compared to each other. If that is the case then HIV, which almost certainly leads to AIDs and eventual death, could be seen as more serious than hepatitis C, which although often chronic and sometimes leads to death, has a far better prognosis. Were the survey to be repeated some thought would need to be given to rewording these questions.

Effects of the Legal Status

Although the sale of needles and syringes to injecting drug users was technically illegal in Western Australia until May 1994, just prior to the time data was collected for this study, it had no significant effect on supply practice although 25% of sellers reported the impending legislative change was a factor in their decision to start selling. Only 3 nonsellers (21%) considered it a factor in their decision not to sell needles and syringes. In contrast, in Cuatt's (1989) Tasmanian study 18 nonsellers (38%) cited their concern about the legalities of supplying injecting equipment to injecting drug users as a reason they chose not to make

needles and syringes generally available and 45% reported that a change in the legislation would encourage them to supply.

Deterrence Theory.

It seems that the previous legal sanctions on the sale of injecting equipment to drug users has not had a major impact in deterring sales in Western Australia. For legal sanctions to be effective punishment must be certain, swift and/or severe (Williams & Hawkins, 1986). The fact that needle and syringe supply was condoned in Western Australia and that no prosecutions for sales had occurred supports the theory of deterrence. Indeed, for 40% of sellers the knowledge that no prosecutions had been laid was an important factor in their decision to sell.

Punishment was not certain, swift or severe as in the classic example of deterrence - namely RBT to reduce the incidence of driving under the influence of alcohol (Homel, 1988). Punishment was in fact non-existent and with the encouragement from the Health Department of Western Australia, the Pharmaceutical Council and the Pharmacy Guild to sell needles and syringes and the condonement of the practice the number of participating pharmacists has continued to increase. Therefore, although a small minority of pharmacists expressed some concerns about the legality of the practice it was not a deterrent overall. Tasmanian pharmacists on the other hand, were in a dubious legal position at the time of Cuatt's (1989) study as the practice was illegal and was not condoned by the State Government, and there was less certainty that they would not be punished, which may be a factor in their finding of only 21% supplying.

Attitudes to Injecting Drug Use and Injecting Drug Users

On average pharmacists had slightly negative attitudes towards injecting drug use and injecting drug users. As there was no significant difference between current sellers and nonsellers it is apparent that many current sellers have put aside their feelings towards injecting drug users and have adopted the government's harm reduction strategy in the interests of public health. While MacCarthey (1994) claimed widespread discrimination of injecting drug users in Australia and that they generally experience a poor response from a wide range of service providers it appears this is not the case in this instance, at least as far as the supply of needles and syringes goes.

The findings are similar to those of Abed and Neira-Munoz (1990) who found that the majority of general practitioners were prepared to help drug dependents despite having negative attitudes towards them on a number of counts. There are differences between these situations, however, in that pharmacists have been asked to engage in an illegal activity to help prevent the transmission of serious blood-borne disease, not only to the drug user but also from them to the general community, and the general practitioners in Abed and Neira-Munoz' study are asked about their willingness to treat drug dependence, a far less controversial activity.

CHAPTER SIX

Conclusions

The vast majority of both metropolitan and country pharmacists in Western Australia currently supply needles and syringes to injecting drug users thereby ensuring availability in most areas of the state. Pharmacists generally have adopted the practice because they believe it is essential to the reduction of the transmission of disease, which is consistent with the trend found in other studies. Although 8% of pharmacists were past sellers this proportion compares favourably with the findings in other states indicating that less pharmacists in Western Australia have ceased supply. However it appears that the proportion of participating pharmacists will fluctuate slightly and it is unlikely that there will be total participation.

While the belief that disruption was unlikely to occur in their pharmacy influenced almost half of current sellers in their decision to supply, this was not borne out by the experience of one third of the total pharmacists and indeed, along with threatening incidents, was the major cause for past sellers to cease supply. Disruptive incidents were also the most important factor that differentiated between current sellers and nonsellers with nonsellers experiencing significantly

more. The incidence of such incidents and the effect that they have on supply practice may indicate the need for support or training for pharmacists, especially in view of the fact that aggression and/or abuse is the major type of incident and many pharmacists seem to not have appropriate strategies for handling the disruption. Further research may need to be carried out to determine whether pharmacists require support and/or training for conducting their business in relation to the supply of injecting equipment.

HIV and hepatitis C were both viewed by pharmacists as serious diseases although hepatitis C to a lesser extent. There was some difficulty interpreting this data but there may be some implications for more education generally concerning the greater possibility of the transmission of hepatitis C.

While pharmacists on average had slightly negative attitudes to injecting drug use and injecting drug users, this had not significantly affected supply practice which may reflect pharmacists' commitment to public health. Pharmacists also were not unduly influenced by the former legal sanctions on the sale of needles and syringes and these findings could be viewed as supporting the theory of deterrence.

It is not known how representative this sample is of the wider population of pharmacists, however the random sampling technique and the high response rate would have enhanced it and the findings in many ways reflect the trends in similar studies

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APPENDIX A

POISONS ACT 1964

Form 14

APPLICATION FOR APPROVAL OF NEEDLE AND SYRINGE PROGRAM

I of
..... hereby apply on behalf of
for the approval of the following needle and syringe program
.....
.....
(specify precisely the activities, and the persons or class of persons conducting those activities, that constitute the program).

1. The program will be conducted at
.....
(specify place or places)

2. The program will be conducted at or between the following times
.....
(specify times)

3. The Co-ordinator of the program will be
.....
(specify name and address of Co-ordinator)

.....
Signature of Co-ordinator

.....
Signature of Applicant

Date:

Note: 1) Return to: Medical Co-ordinator
Communicable Disease Control Unit
PO Box 8172
Stirling Street
PERTH WA 6000

2) For more information
contact: Ms Kathryn Kerry
(09) 227 3777

APPENDIX B



The PHARMACY GUILD of AUSTRALIA
NATIONAL SERVICES

Facsimile Transmission

DATE: JULY 7 1994
TO: J. NEWBEY
HEALTH & HUMAN SERVICES DEPT. EDITH COWAN UNIVERSITY
FAX: (09) 227 7302
FROM: Murray Rees - Director of National Services Division
PHONE: (03) 810 9930
FAX: (03) 818 2590
RE: Survey No. 151

Number of pages including cover sheet: 2

Message

Dear June,

Please find our survey certificate following.

Please use it to convey to our members, our approval of your study. Should you consider that any key findings may be of interest to our 5000+ members then we would be glad to distribute/publish them where possible.

Thank you for involving The Pharmacy Guild of Australia.

Good luck with your research.

Regards,

Murray Rees

c.c. Mr H. W. G. Cuthill - Chairman

SURVEY CERTIFICATE

No. ..151..

THE PHARMACY GUILD OF AUSTRALIA

This is to certify that the documentation for the following
survey has been presented for examination and that the Guild
has no objection to member participation

CONDUCTED BY: *J. NEWBEY - HEALTH & HUMAN SERVICES DEPT. EDITH COWAN UNIVERSITY*

FOR (CLIENT): *AS ABOVE*

PERIOD OF FIELD WORK: *JULY TO AUGUST*

METHOD OF SURVEY: *MAIL*

STATES/AREAS TO BE COVERED: *WESTERN AUSTRALIA*

RATING:

B1

Signature of Approving Officer: *[Signature]* Date: *JULY 6 1994*

PLEASE NOTE: The Pharmacy Guild of Australia has examined the proposed questions to be asked in this survey and has given approval for members to be approached about the survey. Such approval does not obligate any pharmacist/Guild member to participate in the survey. The choice of whether or not to participate is left to the individual.

APPENDIX C

Initial Telephone Call

Hello, may I speak to please?

This is June Newbey from Edith Cowan University. We are currently conducting a state-wide study of pharmacists' attitudes and practices in relation to the supply of needles and syringes to injecting drug users. You are one of only 130 pharmacists selected to take part.

This phone call is to inform you of the study which entails completion of a questionnaire which I will forward to you. The study and the questionnaire have been discussed with both the Pharmaceutical Council of WA and the Pharmacy Guild.

To ensure the results of the survey are genuinely representative of Western Australian pharmacists your participation is important and valuable. You may be assured that the information you supply will be confidential. May I forward a questionnaire to you.

If Yes: Thank you for your cooperation. I will post the questionnaire and a stamped addressed envelope to you within the next day or two. I would appreciate it if you could complete the questionnaire and return it within the next two weeks. Finally, could you please tell me whether you currently supply needles and syringes to injecting drug users? Thank you. Goodbye.

If No: Could you please tell me the reason you do not wish to participate? One final thing, do you currently supply needles and syringes to injecting drug users? Thank you for your time. Goodbye.

APPENDIX D

THE SUPPLY OF NEEDLES AND SYRINGES TO INJECTING DRUG USERS:

ATTITUDES AND PRACTICES OF PHARMACISTS IN WESTERN AUSTRALIA



SURVEY OF WESTERN AUSTRALIAN PHARMACISTS

**EDITH COWAN UNIVERSITY
2 Bradford Street
Mount Lawley WA 6050**

SURVEY OF WESTERN AUSTRALIAN PHARMACISTS

Thank you for your assistance in this endeavor. The following questionnaire contains 43 brief questions related to the provision of needles and syringes.

"Your pharmacy" refers to the pharmacy in which you are currently located. "Injecting drug users" are individuals known or believed to be injecting drugs illicitly.

Please answer ALL questions.

(Unless specified please circle only one number representing the answer you most agree with).

PUBLIC HEALTH

The first set of questions concern public health issues in Western Australia. We'd like to know your thoughts on these matters. *(Please circle one number on each scale).*

1. How serious a health risk to the general public do you believe the HIV virus is in Western Australia?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
Not at all Not very Unsure Serious Very
serious serious serious serious serious

2. How serious a health risk do you believe the HIV virus is for injecting drug users in Western Australia?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
Not at all Not very Unsure Serious Very
serious serious serious serious serious

3. How serious a health risk to the general public do you believe Hepatitis C is in Western Australia?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
Not at all Not very Unsure Serious Very
serious serious serious serious serious

4. How serious a health risk do you believe Hepatitis C is to injecting drug users in Western Australia?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
Not at all Not very Unsure Serious Very
serious serious serious serious serious

5. Do you think that the use of non sterile injecting equipment by injecting drug users represents a significant health hazard to the general public?

1_____2_____3_____4_____5
Not at all Not very Unsure Significant Very
significant significant significant significant

6. Do you think the use of non-sterile injecting equipment by injecting drug users represents a significant health hazard to injecting drug users?

1_____2_____3_____4_____5
Not at all Not very Unsure Significant Very
significant significant significant significant

7. What role do you think pharmacists should play in relation to the prevention of HIV and Hepatitis? (More than one number may be circled).

- 1 Provide advice, information and counselling.
 - 2 Provide information and pamphlets on HIV, Hepatitis and injecting drug use.
 - 3 Sell needles and syringes to injecting drug users.
 - 4 Sell condoms.
 - 5 Provide free sterile needles and syringes on receipt of used equipment.
 - 6 Pharmacists should play no role.
 - 7 Other (Please specify) _____
-

NEEDLE AND SYRINGE DISTRIBUTION

The next set of questions concern the distribution of needles and syringes to injecting drug users.

8. Where do you think injecting drug users should obtain needles and syringes from? (More than one number may be circled).

- 1 Hospitals
- 2 Drug treatment agencies
- 3 Pharmacies
- 4 Police Stations
- 5 Doctors' surgeries
- 6 Community Health Centres
- 7 Outreach vans
- 8 Needle Exchanges
- 9 Vending Machines
- 10 None of the above
- 11 Needles and syringes should not be supplied to injecting drug users.
- 12 Other (Please specify) _____

9. How do you think needles and syringes should be supplied to injecting drug users? (More than one number may be circled).

- 1 Injecting drug users should buy needles and syringes.
- 2 Injecting drug users should exchange used needles and syringes for new equipment.
- 3 Needles and syringes should be supplied free to injecting drug users.
- 4 Needles and syringes should not be supplied at all to injecting drug users.

10. Does your pharmacy have a policy regarding the sale of needles and syringes to injecting drug users?

- 1 Yes
- 2 No

If Yes:

10a. What are the main points of your policy regarding the sale of needles and syringes to injecting drug users?

11. Have you had any training regarding the sale of needles and syringes to injecting drug users?

- 1 Yes
- 2 No

If Yes:

11a. In what year did you have training regarding the sale of needles and syringes to injecting drug users?

Year _____

11b. Which organisation conducted the training regarding the sale of needles and syringes to injecting drug users?

12. Do you support the Health Department of Western Australia's strategy to encourage pharmacists to sell needles and syringes to injecting drug users for harm minimisation reasons?

1 Yes
2 No

CURRENT PRACTICES

Now we would like to know about your practices in relation to the supply of needles and syringes. The following questions relate to the pharmacy in which you are currently located.

13. When did you begin to supply needles and syringes to injecting drug users?

Month _____ Year _____

14. How important were the following in determining your decision to start selling needles and syringes to injecting drug users? (Please circle one number on each scale).

- 14a. I became more convinced that the supply of needles and syringes was essential for the reduction of transmission of disease.

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Neutral Important Very
important important

- 14b. It became clear that the legislation was going to change.

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Neutral Important Very
important important

- 14c. It became clear that disruption to my pharmacy was unlikely to occur.

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Neutral Important Very
important important

14d. It became obvious that no-one was being prosecuted for selling needles and syringes.

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
Not at all Not very Neutral Important Very
important important important important important

14e. I saw the provision of needles and syringes as a viable commercial practice.

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
Not at all Not very Neutral Important Very
important important important important important

14f. Other reasons (Please specify) _____

15. How do you usually sell needles and syringes?

1 In Fitpacks
2 Other (Please specify) _____

16. Approximately how many Fitpacks/needles do you sell in a typical week?

Fitpacks _____
Needles _____
Other _____

17. How much do you charge for Fitpacks/needles?

Fitpacks \$ _____
Needles \$ _____
Other \$ _____

18. Have you experienced a disruptive incident in your pharmacy concerning injecting drug users?

1 No (Go to Q 19)

2 Yes (Please specify)_____

18a. How did you handle the disruptive incident?

18b. Has the disruptive incident influenced your practice of selling needles and syringes to injecting drug users in any way?

1 Yes

2 No

If Yes:

18c. In what way has this influenced your practice of selling needles and syringes to injecting drug users?

19. Have you experienced any/any other problems in your pharmacy as a result of selling needles and syringes to injecting drug users?

1 No (Go to Q 20)

2 Yes (Please specify)_____

If Yes:

19a. Has this influenced your practice of selling needles and syringes to injecting drug users in any way?

- 1 Yes
- 2 No

If Yes to 19a:

19b. In what way has this influenced your practice of selling needles and syringes to injecting drug users?

20. Do you intend to continue to supply needles and syringes to injecting drug users in the future?

- 1 Yes
- 2 No

If No:

20a. What are the reasons for your decision to no longer supply needles and syringes to injecting drug users?

21. Are you currently involved in dispensing methadone?

- 1 Yes
- 2 No

If Yes:

21a. How many clients do you currently supply with methadone?

LEGISLATION

This section focuses on issues related to current legislation and how it impacts on your practices.

22. What is the current legal status regarding the sale of needles and syringes to injecting drug users?

23. In what way has this influenced your practice regarding the sale of needles and syringes to injecting drug users?

ATTITUDES TO INJECTING DRUG USE AND INJECTING DRUG USERS.

This section concerns your attitudes to injecting drug use and injecting drug users. (Please circle one number on each scale).

24. Injecting drug users are mindless pleasure seekers.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

25. Injecting drug use is simply a different kind of life-style that should not be condemned.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

26. Injecting drug users are not capable of changing.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

27. Injecting drug users are criminals by nature.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

28. If a person craves drugs they should overcome this by sheer willpower.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

29. Injecting drug users should be allowed to inject in private.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

30. It is a waste of time trying to help injecting drug users.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

31. If injecting drug use was legal it would not be a problem.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

32. Injecting drug use is just plain wrong.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

33. Injecting drug use is a natural way of obtaining pleasure in human beings.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

DEMOGRAPHIC DETAILS

Finally we would like to ask some questions about yourself and your pharmacy for statistical purposes.

34. In what year did you register as a pharmacist?

Year _____

35. How long have you been working as a pharmacist?

Years _____

36. How long have you been in the present pharmacy?

Months _____ Years _____

37. What is your present age?

38. Which sex are you?

- 1 Male
- 2 Female

39. How many equivalent full time staff are employed at your pharmacy?

40. From the following list of examples which best describes the location of your pharmacy?

- 1 Central Business District
- 2 Regional Shopping Centre
- 3 Strip type shopping
- 4 Neighbourhood shops
- 5 Isolated
- 6 Other (Please specify) _____

41. What are the opening hours of your pharmacy?

Monday _____

Tuesday _____

Wednesday _____

Thursday _____

Friday _____

Saturday _____

Sunday _____

42. What is the largest customer group served by your pharmacy? (More than one number may be circled).

- 1 Unemployed
- 2 Passing trade
- 3 Professionals/Office workers
- 4 Students
- 5 Elderly
- 6 Young families
- 7 "Alternatives"
- 8 Other (Please specify) _____

43. What is your postcode?

Do you have any further comments on the issues in this questionnaire or suggested strategies that might be useful for pharmacists in dealing with injecting drug users?

Please tick the box if you would like a summary of the findings from this study.

☐

Could you please now place the questionnaire in the stamped addressed envelope provided and return to Edith Cowan University.

THANK YOU VERY MUCH FOR YOUR COOPERATION

APPENDIX E

**THE SUPPLY OF NEEDLES AND SYRINGES
TO INJECTING DRUG USERS:**

**ATTITUDES AND PRACTICES OF PHARMACISTS
IN WESTERN AUSTRALIA**



**SURVEY OF WESTERN AUSTRALIAN
PHARMACISTS**

**EDITH COWAN UNIVERSITY
2 Bradford Street
Mount Lawley WA 6050**

SURVEY OF WESTERN AUSTRALIAN PHARMACISTS

Thank you for your assistance in this endeavour. The following questionnaire contains 40 brief questions related to the provision of needles and syringes.

"Your pharmacy" refers to the pharmacy in which you are currently located. "Injecting drug users" are individuals known or believed to be injecting drugs illicitly.

Please answer ALL questions.

(Unless specified please circle only one number representing the answer you most agree with).

PUBLIC HEALTH

The first set of questions concern public health issues in Western Australia. We would like to know your thoughts on these matters. (Please circle one number on each scale).

1. How serious a health risk to the general public do you believe the HIV virus is in Western Australia?

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Unsure Serious Very
serious serious serious serious

2. How serious a health risk do you believe the HIV virus is for injecting drug users in Western Australia?

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Unsure Serious Very
serious serious serious serious

3. How serious a health risk to the general public do you believe Hepatitis C is in Western Australia?

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Unsure Serious Very
serious serious serious serious

4. How serious a health risk do you believe Hepatitis C is to injecting drug users in Western Australia?

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Unsure Serious Very
serious serious serious serious

5. Do you think that the use of non sterile injecting equipment by injecting drug users represents a significant health hazard to the general public?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
Not at all Not very Unsure Significant Very
significant significant significant significant

6. Do you think the use of non-sterile injecting equipment by injecting drug users represents a significant health hazard to injecting drug users?

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
Not at all Not very Unsure Significant Very
significant significant significant significant

7. What role do you think pharmacists should play in relation to the prevention of HIV and Hepatitis? (More than one number may be circled).

- 1 Provide advice, information and counselling.
 - 2 Provide information and pamphlets on HIV, Hepatitis and injecting drug use.
 - 3 Sell needles and syringes to injecting drug users.
 - 4 Sell condoms.
 - 5 Provide free sterile needles and syringes on receipt of used equipment.
 - 6 Pharmacists should play no role.
 - 7 Other (Please specify) _____
-

NEEDLE AND SYRINGE DISTRIBUTION

The next set of questions concern the distribution of needles and syringes to injecting drug users.

8. Where do you think injecting drug users should obtain needles and syringes from? (More than one number may be circled).

- 1 Hospitals
- 2 Drug treatment agencies
- 3 Pharmacies
- 4 Police Stations
- 5 Doctors' surgeries
- 6 Community Health Centres
- 7 Outreach vans
- 8 Needle Exchanges
- 9 Vending Machines
- 10 None of the above
- 11 Needles and syringes should not be supplied to injecting drug users.
- 12 Other (Please specify) _____

9. How do you think needles and syringes should be supplied to injecting drug users? (More than one number may be circled).

- 1 Injecting drug users should buy needles and syringes.
- 2 Injecting drug users should exchange used needles and syringes for new equipment.
- 3 Needles and syringes should be supplied free to injecting drug users.
- 4 Needles and syringes should not be supplied at all to injecting drug users.

10. Does your pharmacy have a policy regarding the sale of needles and syringes to injecting drug users?

- 1 Yes
- 2 No

If Yes:

10a. What are the main points of your policy regarding the sale of needles and syringes to injecting drug users?

11. Have you had any training regarding the sale of needles and syringes to injecting drug users?

- 1 Yes
- 2 No

If Yes:

11a. In what year did you have training regarding the sale of needles and syringes to injecting drug users?

Year _____

11b. Which organisation conducted the training regarding the sale of needles and syringes to injecting drug users?

12. Do you support the Health Department of Western Australia's strategy to encourage pharmacists to sell needles and syringes to injecting drug users for harm minimisation reasons?

1 Yes
2 No

CURRENT PRACTICES

Now we would like to know about your practices in relation to the supply of needles and syringes. The following questions relate to the pharmacy in which you are currently located.

13. Do you sell needles and syringes to customers other than those you know or believe to be injecting drugs illicitly?

1 Yes
2 No

If Yes:

- 13a. How do you differentiate between injecting drug users and other customers in your pharmacy?
(More than one may be circled)

1 Appearance
2 Behaviour
3 Direct questioning
4 Reasons given for requiring syringes
5 'Gut' feeling
6 Other (Please specify) _____

14. Do you intend to supply needles and syringes to injecting drug users in the future?

1 Yes
2 No

If yes:

- 14a. For what reason do you intend to change your current practice in relation to supplying needles and syringes to injecting drug users?

15. Have you sold needles and syringes to injecting drug users in the past?

- 1 Yes
- 2 No (Go to Q 16)

If yes:

15a. When did you stop selling needles and syringes to injecting drug users?

Month _____ Year _____

15b. Have you experienced a disruptive incident in your pharmacy concerning injecting drug users?

- 1 No (Go to Q 15c)
- 2 Yes (Please specify) _____

i. How did you handle the disruptive incident?

ii. Did the disruptive incident influence your practice of selling needles and syringes to injecting drug users in any way?

- 1 Yes
- 2 No

If Yes:

ii.a. In what way did this influence your practice of selling needles and syringes to injecting drug users?

15c. Were the following factors important in your decision to stop selling needles and syringes to injecting drug users? (Please circle one number on each scale).

i. Selling needles and syringes had caused disruption in my pharmacy.

1_____2_____3_____4_____5
Not at all Not very Neutral Important Very
important important important important

ii. I was losing too much stock from shoplifting.

1_____2_____3_____4_____5
Not at all Not very Neutral Important Very
important important important important

iii. There were incidents that threatened the safety of staff and/or other customers.

1_____2_____3_____4_____5
Not at all Not very Neutral Important Very
important important important important

iv. I was concerned about the legal ramifications.

1_____2_____3_____4_____5
Not at all Not very Neutral Important Very
important important important important

v. I had ethical concerns about appearing to condone illicit drug use.

1_____2_____3_____4_____5
Not at all Not very Neutral Important Very
important important important important

- vi. I was concerned about the local community's attitude relating to the supply of needles and syringes to injecting drug users.

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Neutral Important Very
important important

- vii. Other (Please specify) _____

(Please answer question 16. Although you will find it very similar to the questions you just answered it is also important that we investigate your current reasons for not selling needles and syringes to injecting drug users).

16. How important are the following factors in determining your current decision not to sell needles and syringes to injecting drug users? (Please circle one number on each scale).

- 16a. Provision of needles and syringes encourages illicit drug use.

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Neutral Important Very
important important

- 16b. I am concerned about shoplifting in my pharmacy.

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Neutral Important Very
important important

- 16c. I am concerned about possible aggression towards staff of the pharmacy.

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Neutral Important Very
important important

16d. Because of the current legislation on the supply of needles and syringes.

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Neutral Important Very
important important

16e. My other customers would complain or stop coming to the pharmacy if I sold needles and syringes to injecting drug users.

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Neutral Important Very
important important

16f. I don't want the kind of people who use drugs coming into my pharmacy.

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Neutral Important Very
important important

16g. I have not had any requests for needles and syringes.

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Neutral Important Very
important important

16h. I am concerned about being prosecuted for providing needles and syringes.

1 _____ 2 _____ 3 _____ 4 _____ 5
Not at all Not very Neutral Important Very
important important

16i. Other (Please specify) _____

17. What would encourage you to sell needles and syringes to injecting drug users?

18. Are you currently involved in dispensing methadone?

- 1 Yes
- 2 No

If Yes:

18a. How many clients do you currently supply with methadone?

LEGISLATION

This section focuses on issues related to current legislation and how it impacts on your practice.

19. What is the current legal status regarding the sale of needles and syringes to injecting drug users?

20. In what way does this influence your practice regarding the sale of needles and syringes to injecting drug users?

ATTITUDES TO INJECTING DRUG USE AND INJECTING DRUG USERS

This section concerns your attitudes to injecting drug use and injecting drug users. (Please circle one number on each scale).

21. Injecting drug users are mindless pleasure seekers.

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
Strongly Agree Agree Unsure Disagree Strongly Disagree

22. Injecting drug use is simply a different kind of life-style that should not be condemned.

1 _____ 2 _____ 3 _____ 4 _____ 5 _____
Strongly Agree Agree Unsure Disagree Strongly Disagree

23. Injecting drug users are not capable of changing.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

24. Injecting drug users are criminals by nature.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

25. If a person craves drugs they should overcome this by sheer willpower.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

26. Injecting drug users should be allowed to inject in private.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

27. It is a waste of time trying to help injecting drug users.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

28. If injecting drug use was legal it would not be a problem.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

29. Injecting drug use is just plain wrong.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

30. Injecting drug use is a natural way of obtaining pleasure in human beings.

1 _____ 2 _____ 3 _____ 4 _____ 5
Strongly Agree Agree Unsure Disagree Strongly Disagree

DEMOGRAPHIC DETAILS

Finally we would like to ask some questions about yourself and your pharmacy for statistical purposes.

31. In what year did you graduate as a pharmacist?

Year _____

32. How long have you been working as a pharmacist?

Years _____

33. How long have you been in the present pharmacy?

Months _____ Years _____

34. What is your present age?

Years _____

35. Which sex are you?

- 1 Male
- 2 Female

36. How many equivalent full time staff are employed at your pharmacy?

37. From the following list of examples which best describes the location of your pharmacy?

- 1 Central Business District
- 2 Regional Shopping Centre
- 3 Strip type shopping
- 4 Neighbourhood shops
- 5 Isolated
- 6 Other (Please specify) _____

38. What are the opening hours of your pharmacy?

Monday _____

Tuesday _____

Wednesday _____

Thursday _____

Friday _____

Saturday _____

Sunday _____

39. What is the largest customer group served by your pharmacy? *(More than one may be circled).*

- 1 Unemployed
- 2 Passing trade
- 3 Professionals/Office workers
- 4 Students
- 5 Elderly
- 6 Young families
- 7 "Alternatives"
- 8 Other *(Please specify)* _____

40. What is your postcode?

Do you have any further comments on the issues in this questionnaire or suggested strategies that might be useful for pharmacists in dealing with injecting drug users?

Please tick the box if you would like a summary of the findings from this study.

☐

Could you please now place the questionnaire in the stamped addressed envelope provided and return to Edith Cowan University.

THANK YOU VERY MUCH FOR YOUR COOPERATION

APPENDIX F

THE SUPPLY OF NEEDLES AND SYRINGES TO INJECTING DRUG USERS: ATTITUDES AND PRACTICES OF PHARMACISTS IN WESTERN AUSTRALIA

PRE-TEST OF QUESTIONNAIRE

Thank you for agreeing to participate in the pre-testing of this questionnaire. This is one of two questionnaires developed, one of which will be forwarded to pharmacists depending on their supply practices. A preceding telephone call to pharmacists will determine this. It is the purpose of this pre-test stage to determine the time the questionnaire takes for completion and the clarity of the questions. No further questions will be included but adjustments will be made where necessary.

Please answer questions by adopting the role of seller, non-seller or past seller as indicated on the top of the questionnaire.

Time to complete _____

Please comment on any difficulties, ambiguities etc., you found with any of the questions. Suggestions for improvement of the questionnaire are also welcome.

Please write on back of the page if you have further comments.

Your assistance is very much appreciated. Thank you.

No	Name	Address	Town	Pcode	Phone No	Pharmacist	Ph Call	C'back	C'back
1	ABC Pharmacy	7 Long Street	Suburbia	6666	09 123456	Fred Flintrock			
2	Town Square Chemist	Shop 5, Town Square	Downtown	6667	09 123437	Joe Cool			
3	Phil's Pharmacy	5 Sunset Boulevard	Smithson	6688	09 168942	Alice Anonymous			
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									

APPENDIX C

This form was made on a spreadsheet and was printed on continuous computer paper so that the print on the two pages almost met. The pages were taped at the back on the join and this enabled a view of each record across the two pages.



EDITH COWAN
UNIVERSITY

PERTH WESTERN AUSTRALIA
JOONDALUP CAMPUS

Joondalup Drive, Joondalup
Western Australia 6027
Telephone (09) 405 5555
Facsimile (09) 300 1257

APPENDIX H

Dear

RE: THE SUPPLY OF NEEDLES AND SYRINGES TO INJECTING DRUG
USERS: ATTITUDES AND PRACTICES OF PHARMACISTS IN WESTERN
AUSTRALIA.

In Western Australia, the supply of needles and syringes to injecting drug users by pharmacists, and pharmacists attitudes about these issues has not been extensively examined. The purpose of the present study is to investigate these issues, and provide you with an opportunity to voice your own views.

One hundred and thirty pharmacists from Western Australia have been randomly selected to take part in the study. In order that the results be genuinely representative it is important that each questionnaire be completed and returned. Your input is both valuable and appreciated.

You may be assured of complete confidentiality. The questionnaire has an identification number for mailing purposes only. This is to check your name off the mailing list when the questionnaire is returned. Overall results will be collated, but individual respondents will not be identified.

A summary of the findings will be made available to both the Pharmaceutical Council and the Pharmacy Guild. If you would like to receive your own copy please tick the box at the end of the questionnaire.

Please return the completed questionnaire in the stamped addressed envelope by

If you have any questions please telephone June Newbey on (09) 445-2139 or Celia Wilkinson (Edith Cowan University) on (09) 370-6329.

Thank you for your assistance in this research project.

Yours faithfully

J June Newbey

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Pharmacy Guild of Australia Survey Approval No 151 Rating B.1

JOONDALUP CAMPUS
Joondalup Drive, Joondalup
Western Australia 6027
Telephone (09) 405 5555

MOUNT LAWLEY CAMPUS
2 Bradford Street, Mount Lawley
Western Australia 6050
Telephone (09) 370 6111

CHURCHLANDS CAMPUS
Pearson Street, Churchlands
Western Australia 6018
Telephone (09) 273 8333

CLAREMONT CAMPUS
Goldsworthy Road, Claremont
Western Australia 6010
Telephone (09) 273 8333

BUNBURY CAMPUS
Robertson Drive, Bunbury
Western Australia 6230
Telephone (097) 80 7777

APPENDIX I

First Follow-up Telephone Reminder Call

Hello, this is June Newbey speaking from Edith Cowan University.

I am calling regarding the questionnaire I forwarded to you concerning the supply of needles and syringes to injecting drug users. Did you receive it?

If yes: As I haven't yet received it back I wonder whether you have had the opportunity to complete it. I realize you may be very busy so this is just a reminder. Your answers are very important to us and I would appreciate it if you could return it as soon as possible.

If you require another questionnaire I will forward it to you. Thank you very much. Goodbye.

If No: I am sorry it did not reach you. May I forward another questionnaire to you?

If Yes: Thank you. Could you please tell me your address so I can check that the address I have for you is accurate. Thank you very much. I will forward another questionnaire tomorrow. I would appreciate it if could complete and return it as soon as possible. Goodbye.

If no: Thank you for your time. Goodbye.

APPENDIX J

Second Follow-up Telephone Reminder Call

Hello. This is June Newbey from Edith Cowan University. As yet I have not received the questionnaire I posted to you concerning the supply of needles and syringes to injecting drug users.

Your answers are very important to ensure the results are representative of pharmacists' views. Could you please return the questionnaire as soon as possible?

Thank you very much for your assistance.



**EDITH COWAN
UNIVERSITY**

PERTH WESTERN AUSTRALIA
JOONDALUP CAMPUS

Joondalup Drive, Joondalup
Western Australia 6027
Telephone (09) 405 5555
Facsimile (09) 300 1257

APPENDIX K

4/10/94

Dear

**RE: "THE SUPPLY OF NEEDLES AND SYRINGES TO INJECTING
DRUG USERS: ATTITUDES AND PRACTICES OF PHARMACISTS
IN WESTERN AUSTRALIA"**

We are writing to express our appreciation for your participation in the research we are currently conducting regarding the supply of needles and syringes to injecting drug users. The response received was overwhelming and indicates to us the importance of this topic to pharmacists and the concern they have about these issues. By completing and returning the questionnaire you have helped ensure that the findings better represent the views of pharmacists in Western Australia.

The data analysis is currently being undertaken and the research report prepared. This is expected to be finalised towards the end of the year when your copy of the results will be forwarded to you.

Thank very much for your cooperation in this important social research.

Yours faithfully,

/
June Newbey, Honours Student

Celia Wilkinson, Lecturer - Health Studies



**EDITH COWAN
UNIVERSITY**

WESTERN AUSTRALIA
BUNBURY CAMPUS

Robertson Drive, Bunbury
Western Australia 6230
Telephone (097) 80 7777
Facsimile (097) 21 6994

APPENDIX L

4/10/94

Dear


**RE: "THE SUPPLY OF NEEDLES AND SYRINGES TO INJECTING
DRUG USERS: ATTITUDES AND PRACTICES OF PHARMACISTS
IN WESTERN AUSTRALIA"**

We are writing to express our appreciation for your participation in the research we are currently conducting regarding the supply of needles and syringes to injecting drug users. The response received was overwhelming and indicates to us the importance of this topic to pharmacists and the concern they have about these issues. By completing and returning the questionnaire you have helped ensure that the findings better represent the views of pharmacists in Western Australia.

The data analysis is currently being undertaken and the research report prepared. This is expected to be finalised towards the end of the year when a copy of the results will be made available to both The Pharmaceutical Council of Western Australia and the Pharmacy Guild of Australia.

Thank very much for your cooperation in this important social research.

Yours faithfully,

 June Newbey, Honours Student

Celia Wilkinson, Lecturer - Health Studies.



APPENDIX M

4/10/94

The Director
National Services Division
Pharmacy Guild of Australia
40 Burwood Road
HAWTHORNE
Victoria 3122

**RE: "THE SUPPLY OF NEEDLES AND SYRINGES TO INJECTING
DRUG USERS: ATTITUDES AND PRACTICES OF
PHARMACISTS
IN WESTERN AUSTRALIA"**

Dear Mr Rees,

The data gathering process in the above study has been concluded. The sample of 130 pharmacists selected to take part have shown overwhelming cooperation with this project. A response rate of 89% has been achieved, an excellent return for a survey of this kind. Such a response ensures that the findings will better represent the views of Western Australian pharmacists.

Approval of the survey by The Pharmacy Guild helped legitimise the study and was undoubtedly a very important factor in achieving this high response rate. The assistance given by you and your organisation is very much appreciated and has aided the smooth execution of the data gathering process.

The data analysis is currently being undertaken and the research report prepared. This is expected to be finalised towards the end of the year when a copy of the results will be forwarded to you.

Yours faithfully,

June Newbey, Honours Student

Celia Wilkinson, Lecturer - Health Studies

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**EDITH COWAN
UNIVERSITY**

PERTH WESTERN AUSTRALIA
JOONDALUP CAMPUS

Joondalup Drive, Joondalup
Western Australia 6027
Telephone (09) 405 5555
Facsimile (09) 300 1257

APPENDIX N

4/10/94

The President
Pharmacy Guild of Australia
Hay Street
WEST PERTH 6004

**RE: "THE SUPPLY OF NEEDLES AND SYRINGES TO INJECTING
DRUG USERS: ATTITUDES AND PRACTICES OF PHARMACISTS
IN WESTERN AUSTRALIA"**

Dear Mr Zafer,

The data gathering process in the above study has been concluded. The sample of 130 pharmacists selected to take part have shown overwhelming cooperation with this project. A response rate of 89% has been achieved, an excellent return for a survey of this kind. Such a response ensures that the findings will better represent the views of Western Australian pharmacists.

Approval of the survey by The Pharmacy Guild helped legitimise the study and was undoubtedly a very important factor in achieving this high response rate. The assistance given by your organisation is very much appreciated and has aided the smooth execution of the data gathering process.

The data analysis is currently being undertaken and the research report prepared. This is expected to be finalised towards the end of the year when a copy of the results will be forwarded to you.

Yours faithfully,

✓
June Newbey, Honours Student

Celia Wilkinson, Lecturer - Health Studies



4/10/94

APPENDIX O

The Registrar
Pharmaceutical Council of Western Australia
21 Hamilton Street
SUBLACO 6008

**RE: "THE SUPPLY OF NEEDLES AND SYRINGES TO INJECTING
DRUG USERS: ATTITUDES AND PRACTICES OF PHARMACISTS
IN WESTERN AUSTRALIA"**

Dear Mr Brennan,

The data gathering process in the above survey has been concluded. The sample of 130 pharmacists selected to take part have shown overwhelming cooperation with this project. A response rate of 89% has been achieved, an excellent return for a survey of this kind. Such a response ensures that the findings will better represent the views of Western Australian pharmacists.

The assistance given by your organisation in the planning of the study and preparation of the questionnaire are very much appreciated and have aided the smooth execution of the data gathering process.

The data analysis is currently being undertaken and the research report prepared. This is expected to be finalised towards the end of the year when a copy of the results will be forwarded to you.

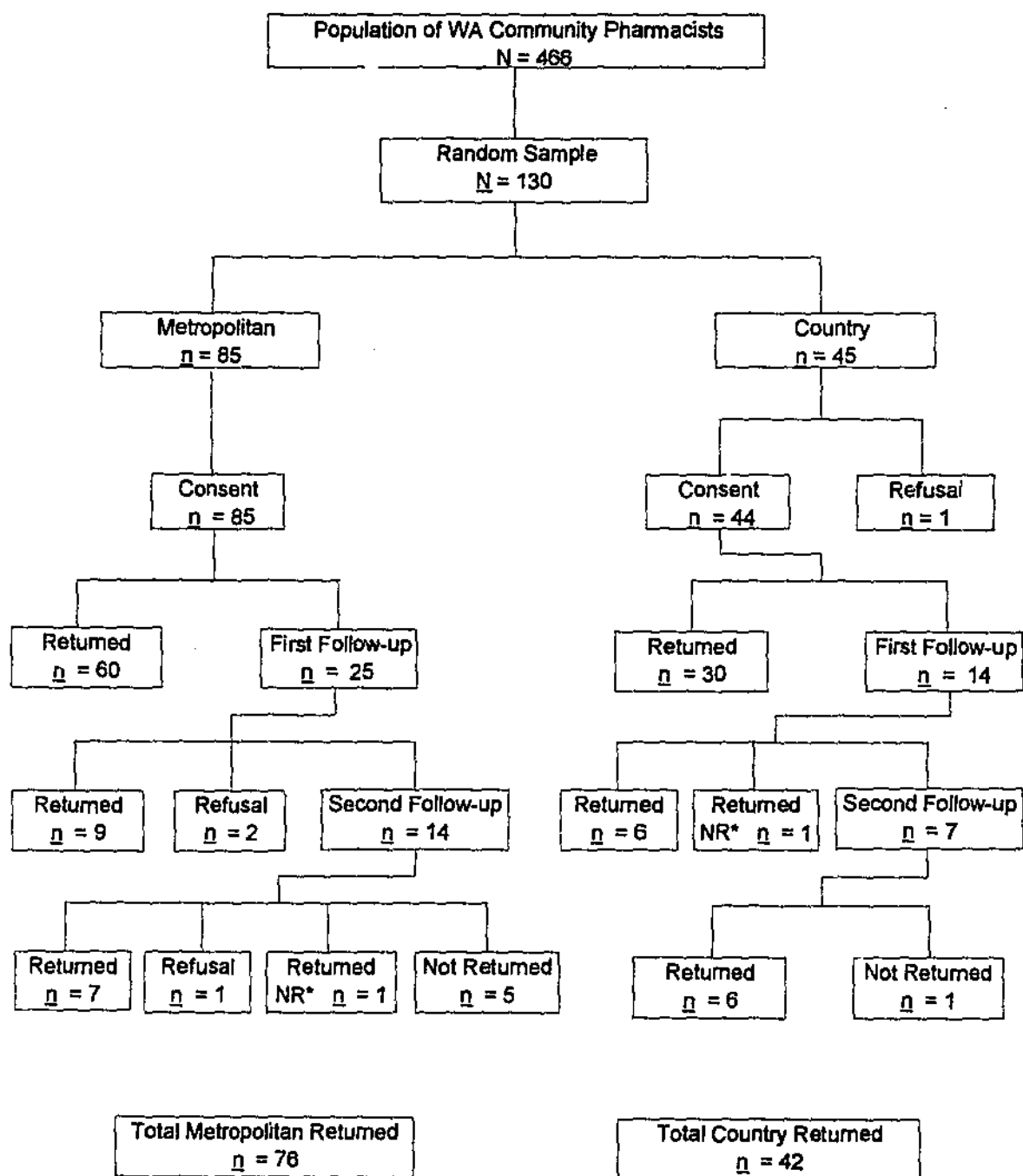
Yours faithfully,


June Newbey, Honours Student

Celia Wilkinson, Lecturer Health Studies.

APPENDIX P

Flowchart of Pharmacists' Response



* NR = Not Received (Pharmacist claimed to have returned the questionnaire but it was not received).