THE ASSOCIATION BETWEEN INJECTING DRUG USERS KNOWLEDGE, SELF-EFFICACY BELIEFS, PEER GROUP NORMS AND HEPATITIS C RISK BEHAVIOUR

and RESEARCH PORTFOLIO

PART ONE

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Table of Contents

Part One (this bound copy)

Research Portfolio Appendices

Table of Contents (continued)

Part Two (separately bound; numbered from page 1)

Research Portfolio Appendices

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SMALL SCALE SERVICE RELATED PROJECT

A Profile of One Years Clinical Psychology Service to the Community Mental Health Team, Lanarkshire.

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Written in accordance for submission to Clinical Psychology Forum,
(Author's notes in Appendix 1)

Abstract

The present study is concerned with team members attitudes and satisfaction towards the Clinical Psychology service within the Hamilton Community Mental Health Team (CMHT). It also aims to determine whether the psychology service is meeting the objectives which it initially set. These include treating the seriously mentally ill and working in a multi-disciplinary way. Information was gathered from client case files and team members completed a questionnaire in order to assess their views.

Results from the study indicated that team members and community agencies are utilizing the Clinical Psychology service to the CMHT. Team members indicated that they value the individual work which psychology undertakes with clients and that they would like psychology to become involved in team training. Results also demonstrated that the majority of team members are satisfied with the present service and that it is fulfilling it's initial objectives.

Key words: Community Mental Health Teams, Clinical Psychology.

Introduction

The implementation of 'Community Care' since the Griffiths report (1982) enabled many people who had received long-term psychiatric care to relocate to the community. In order to meet their complex healthcare needs, joint working was encouraged between health and social services which has led to the widespread development of Community Mental Health Teams (CMHT's).

As CMHT's have become a major focus of service provision, research has been undertaken into their work. Onyett & Ford (1996) described CMHT's as "a cost effective option which is valued by users, carers and referrers". Additionally, Mearson et al (1992) site that the work undertaken by CMHT's is clinically effective.

The Role of Clinical Psychologists

In recent years clinical psychologists have undertaken active roles within CMHT's. Their involvement has been encouraged by research which demonstrates the usefulness of psychological therapies for clients with serious mental illness (Falloon, 1985; Tarrier, 1989). In order to define the role of psychologists within CMHT's, research has been undertaken into team member's perceptions of their work. In a survey of 5 CMHT's Cushion (1997) found the main roles of a clinical psychologist to be assessment and individual work with clients. A similar study by Osborne-Davies (1996) described the main services provided by psychology to the CMHT as clinical work and training. Those questioned however, were found to have little understanding of the contribution of clinical psychologists, perceiving them as "a virtually unknown professional group".

The Present Study

The present study in relation to those discussed above aims to assess team member's attitudes and satisfaction toward a recently developed Clinical Psychology service within a CMHT. It also aims to determine whether the psychology service is meeting the objectives which it initially set.

The Hamilton CMHT became operational in January 1992. It was developed as a joint initiative between Lanarkshire Healthcare NHS Trust and Strathclyde Regional Council. Its aims are to provide a multi-disciplinary service to individuals/families with severe enduring mental health problems and complex needs. The first Clinical Psychologist was appointed to the team on a part time basis in February 1996. The psychologist has 4 sessions per week with the team and the style of the service is that she is based within team offices. At the time of the study, the psychology service to the CMHT had been running for over one year.

The main aims of the present study are outlined as follows:-

- Firstly, to assess team members views regarding the clinical psychology service and their understanding of the work of the Psychologist. This included views about the possible direct and indirect roles of psychology within the CMHT, and team members understanding of the referral system.

- The second aim of the study was to assess the performance of the service in relation to its initial objectives. The objectives of the psychology service to the CMHT were operationally defined within the study as 'multi-disciplinary work' and focusing upon the 'treatment of the seriously mentally ill'. These objectives were outlined by the psychologist on her arrival to the team and meet with the overall service principles of the Hamilton CMHT.

- The third aim of the study was to assess team member's satisfaction with the service and their views regarding future service developments.

Method

1. Procedure:

The procedure of the present study involved gathering two kinds of information. Firstly, permission was given to obtain information from client case files. Using this data, an in-depth review of the referrals made to psychology was undertaken. Secondly, following a review of the current literature, a questionnaire was devised which addressed current research themes (e.g. team member's perceptions of psychology within the CMHT). The questionnaire was also tailored in order to answer research questions specifically relating to the psychology service in the Hamilton CMHT. Administration of the questionnaire involved meeting with team members, and requesting that they complete the questionnaire.

2. Participants:

The study was defined to team members as an evaluation of the psychology service to the CMHT. There are twelve CMHT members whose designations are as follows:

7 Community Psychiatric Nurses
1 Psychiatrist
1 Registrar
1 Occupational Therapist
1 Social Worker
1 Counsellor

In all, eleven team members took part in the study (one was on holiday).

3. Materials:

***Information from Client Case Files*:**

(a). Demographic information was obtained from client case files in order to provide background data to the study.

(b). Information from client case files was also utilized to quantitatively determine whether the psychology service was treating the 'seriously mentally ill'. Therefore, the percentage of referrals which met the criteria for serious mental illness as defined by CMHT specifications* was calculated.

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* ('Serious mental illness' was classified by the Care Programme Approach specification which is used in Lanarkshire. This specifies that clients should have a previous psychiatric diagnosis and an enduring mental illness which is severely disabling to their lives).

(c). Additionally, the referrals made within the first year of the service were categorized in order to quantify the types of cases which were being referred to psychology. This was undertaken by categorizing case file information in accordance with the referral categories used in the questionnaire. This enabled comparison between the referrals made to psychology and team member's perceptions of the referrals made. All of the categorizations made to referrals were verified by the team psychologist.

(d). Information from client case files was also used to determine the percentage of the psychologist's cases which involved multi-disciplinary work. The number of psychology clients being treated by additional team members was therefore calculated.

(ii) ***The Questionnaire:*** The questionnaire (see Appendix 1) was structured to answer research questions as follows-

(a). Views of Psychology - In order to assess team member's views about the psychology service to the CMHT, participants were required to answer questions about the possible direct and indirect roles of clinical psychology. Participants were also asked about the referral system in order to determine the reasons they refer to psychology and whether they use psychology's referral form.

(b)Service Objectives - In order to provide a qualitative measure of whether the psychology service was meeting its objectives, participants answered questions about the

types of cases they usually refer to psychology and the degree of communication which they have with the psychologist. This gave a descriptive account of whether clients with serious mental illness were being referred and the level of multi-disciplinary working which was taking place.

(c) Service Satisfaction - Team members were asked to define their level of satisfaction with a number of aspects of the psychology service. This included referral ability, waiting time, psychologists involvement in the team, consultation and the work of the psychologist.

(d) Future Developments - In order to define team member's views regarding future developments, they were required to rate their first and second preferences from a list of possible future developments outlined previously by the team psychologist. Some space was also allocated in order that they could offer their own ideas.

Results

Demographic Information: Within the first year of the service, psychology received 40 referrals. Twenty-one referrals were males (52.5%) and nineteen were females (47.5%). Of the referrals made, 31 (77.5%) came from team members and 9 (22.5%) came from outside agencies. Table 1 indicates the numbers of referrals made to psychology from each profession. Of those referred, 13 clients completed treatment, 13 dropped out of treatment, 9 failed to attend their initial appointment and 5 were referred on to different services.

A: Views of Psychology:

1. The Psychologists' Roles:

(i). Direct Roles - Team members were asked to choose from questionnaire data up to 5 of what they considered to be the most important direct roles of psychology in the CMHT. They were then required to rank order their choices from 1-5, '1' being the most important role. Eighty-one percent of team members chose 'Individual Work with Clients' to be the most important direct role of the psychologist (mean rank 1.7). 'Psychological Assessment' was rated by 55% of team members as the second most important direct role. Table 2 outlines the direct roles chosen by most team members.

(ii) Indirect Roles - Team members were asked to choose from questionnaire data up to 5 of what they considered to be the most useful indirect roles of psychology within the CMHT. They were then required to rank order their choices from 1-5, 1 being the most useful indirect role. Fifty-five percent of team members rated 'Team Training in Psychological Issues' to be the most useful indirect role which psychology could undertake (mean rank 1.7). Education/Health Promotion was chosen by 36% of team members as the second most useful role (mean rank 2.2). Table 3 outlines the indirect roles chosen by most team members.

2. The Referral System: In order to determine whether team members use the psychology referral form, they were required to define from a list of 5 types of referral

procedure that which they used most often. Forty-five percent of team members indicated that they use a 'combination of referral procedures'. The distribution of responses was large which would suggest that they do not use a set referral procedure (Figure 1). Team members were also asked to rate on the questionnaire their 3 most common reasons for referring cases to psychology. They then ranked these reasons from 1-3, '1' being the most usual reason for referral. Seventy-three percent of team members chose the most usual reason for referral as viewing the 'problem as psychological' (mean rank 1.2). Fifty-five percent of team members chose 'Gaining an alternative opinion' as the second most usual reason for referral (mean rank 2.7). No one indicated referring to psychology on the basis of the earliest available appointment. Table 4 outlines the referral procedures chosen by most team members.

B: Service Objectives:

Treating Clients with Serious Mental Illness:

(i). Quantitative Data: Information from case notes indicated that 73% of the cases which were referred to psychology within the first year met the criteria for serious mental illness. Additionally, information from client case files indicated that the main types of problem referred to psychology were 'multiple difficulties' (e.g. people with more than one problem) and 'complex enduring anxiety'. Table 5 outlines the number of referrals made for each problem type.

(ii.) Qualitative Data: In comparison with the quantitative data, team members perceptions of the types of cases referred to psychology was assessed. Team members

were requested to indicate on the questionnaire up to five of the most frequent types of cases which they refer to psychology. They ranked these from 1-5 in terms of frequency, '1' being the most frequent referral type. The large distribution of responses in terms of ranking indicated that team members differ in the types of cases which they most usually refer to psychology. However, when responses to each referral type were grouped, a good level of consistency was found (Table 6). Ninety-one percent of team members ranked anxiety cases within their five most frequent referral types to psychology (mean rank 2.7). This was followed by Obsessive Compulsive disorder which was rated by 82% of team members within their five most frequent referral types (mean rank 2.1). Seventy-three percent of team members chose Trauma (mean rank 1.9) and also Depression (mean rank 3.1) within their five most frequent referral types to psychology.

Multi-disciplinary Work:

(i). Quantitative Data - Multi-disciplinary working was looked at in terms of the number of the psychologists cases which an additional team member was involved with. Information from client case files in relation to this requirement indicated that 40% of the psychologists' cases involved multi-disciplinary work.

(ii)Qualitative Data - Multi-disciplinary working was also analysed in terms of team members perceptions of the amount of communication which they have with psychology regarding joint casework. Team members were asked to describe the level of communication which they have with psychology on a scale, ranging from 'never

communicate' to 'always communicate'. There was a relatively wide distribution of responses (Figure 2) which would suggest that there is more communication between psychology and some team members than others.

C: Service Satisfaction:

Team members were asked to define their level of satisfaction with a number of aspects of the psychology service on a scale ranging from 'very satisfied' to 'very dissatisfied' (Table 7). Most team members rated their opinion of the psychology service in terms of 'satisfied' or 'very satisfied' which would indicate that they feel positive about the service. Waiting time to see a psychologist was one aspect of the service which a small number of team members described in terms of dissatisfaction. (Additionally, two team members who had not yet used the psychology service did not answer the service satisfaction questions).

D: Future Developments:

In order to measure team members attitudes to possible future developments they were required to rank on the questionnaire their first and second preferences from a list of possible future developments which were defined by the team psychologist. 'Staff training in Psychological Issues' was chosen by 73% of team members as the most important future service development (mean rank 1.1). No one offered any of their own ideas regarding future service developments. Table 8 outlines the types of future development chosen by most team members.

Discussion

Information from the study indicates that most disciplines within the CMHT have made referrals to the psychology service within its first year of operation. This suggests that team members are aware of the service and are utilizing it for clients. In addition, a quarter of psychology's referrals came directly from outside agencies (e.g. GP's, Community Projects). This may indicate that the service is also being recognized within the community.

With regards to the most important direct role of psychology within the CMHT, eighty-one percent of team members chose 'individual work with clients'. 'Psychological Assessment' was rated by most team members as psychology's second most important direct role. That individual clinical work is viewed as psychology's most important role within the CMHT concurs with previous research from Cushion (1997). It would seem therefore, that team members value the skills which psychologists have working on an individual basis with CMHT clients.

The majority of CMHT members indicated that the most useful indirect roles of psychology are 'Team Training in Psychological Issues' and 'Health Education/Promotion'. Team Training in Psychological Issues' was also chosen as the most useful future service development. It seems clear from these findings that the CMHT members would like psychology to include team training within their remit. Indeed, it may be one of the advantages of working within a multi-disciplinary setting that professionals can organize inservice training to learn from each others skills.

With regards to the referral system, results from the study suggest that referrals are made in a variety of ways and that psychology's referral form is not always being utilized. Team members did make reference to the referral form as part of the 'combination of referral methods' which they use but they also indicated that they additionally like to discuss the referrals with psychology.

The majority of team members said that they usually refer what they consider to be 'psychological type' cases to psychology. This suggests that effort is being made to make referrals which are appropriate to the service. This finding contradicts other authors suggestions that the key criteria for allocation of referrals within CMHT's is "whoever has a free space in their diary" (Searle, 1991). No one in the present study acknowledged using this criteria for referral.

An additional aim of the study was to assess whether psychology was meeting its initial objectives. With regards to 'multi-disciplinary working', qualitatively there was a large distribution of responses in relation to the level of communication which team members have with psychology in relation to joint casework. This indicates that multi-disciplinary collaboration may be taking place between psychology and some team members but not others. Increased communication between psychology and team members with whom they do not often collaborate may be helpful to maximize multi-disciplinary working. As a quantitative measure of multi-disciplinary working, the number of the psychologists cases which an additional team member was involved with

was calculated. Forty percent of psychology's clients were also involved in work with an additional team member. This figure may seem low however it compares favorably in relation to previous research findings which indicate that "it is rare if more than 13% of CMHT cases have more than one worker involved" (Searle, 1991).

Case note information indicated that 73% of the referrals made to psychology met the criteria for serious mental illness. Additionally, classification of the referrals made suggested that most cases referred to psychology were for clients classified as having 'multiple problems'. This perhaps indicates that the referrals were appropriate to psychology in that they required complex case formulation. Qualitatively however, many team members ranked anxiety cases as being their most frequent referrals to psychology whilst referrals for direct treatment of psychoses were identified by few. This may indicate that team members do not as yet view psychology's main role as working with the new techniques which have been developed for psychoses.

With regards to satisfaction with the psychology service to the CMHT, results indicate that team members feel positive about most aspects of the service. This includes ability to refer to psychology, ability to access a psychological perspective on cases, the psychologists work, the waiting list and the level of the psychologist's involvement within the team. A small number of team members described the waiting list in terms of dissatisfaction. This perhaps indicates a difficulty with regards team members awareness of this part of the service as presently there is no waiting list for psychology.

In conclusion, team member's responses clearly suggest a role for clinical psychology within the CMHT. Team members indicated that they particularly value the individual work which psychology undertakes with clients and that they would also like psychology to become involved with team training. Results also demonstrated that the majority of team members are satisfied with the present service.

Service Recommendations:

1. To widen communication to include more team members.
2. To educate team members about the type of work which psychologists can undertake with clients who have psychosis.
3. To include team training within psychology's remit.

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Table 1: Referrals to Psychology in the 1st year of the Service

	Professions	Number of Referrals Made
	Psychiatry	12 (30%)
Team Members	Nursing	11 (27.5%)
	Social Work	7 (17.5%)
	Occupational Therapy	1 (2.5%)
Other Agencies	G.P.'s	8 (20%)
	Community Projects	1 (2.5%)

Table 2: Frequency of Responses to Psychology's Most Important Direct Role

Rank	Type of Direct Role Chosen by Most Team Members at this Rank	Frequency of Response	Mean Rank
1st	Individual Work	9 (81%)	1.7
2nd	Psychological Assessments	6 (55%)	2.8
3rd	Discussion of Referrals	4 (36%)	3.3
4th	Recommendation of therapy	5 (45%)	3.2
5th	Cognitive Testing	4 (36%)	4.2

Table 3: Frequency of Responses to Psychology's Most Useful Indirect Roles

Rank	Type of Indirect Role Chosen by Most Team Members at this Rank	Frequency of Response	Mean Rank
1st	Team Training	7(55%)	1.7
2nd	Education/Health Promotion	6 (36%)	2.2
3rd	Consultation	1 (9%)	2.9
4th	Research	3 (27%)	3.3
5th	Supervision	2 (18%)	3.4

Table 4: Reasons for Referral of Cases to Psychology

Rank	Reason for Referral Chosen by Most Team Members at this Rank	Frequency of Responses	Mean Rank
1st	Psychological Type Problem	8 (73%)	1.2
2nd	Alternative Opinion	6 (55%)	2.7
3rd	Professional Back-up	4 (36%)	2.7

Table 5: A Profile of the Types of Problems Referred to Psychology Based Upon Information from Client Case Notes

Type of Problem	Number of Referrals
Multiple problems	15
Complex Enduring Anxiety	9
Severe Depression (inc. suicide/self harm)	5
Trauma (incl. Sexual Abuse)	5
Obsessive Compulsive Disorder	3
Schizophrenia	1
Paranoia	1
Sexual Dysfunction	1
Cognitive Assessment	0
Mania/Manic Depression	0
Personality Disorder	0

Table 6: A Profile of the Types of Problems Referred to Psychology Based Upon Team Members Views

Type of Problem	Number of Team Members who Rated it within 5 Most Frequent Referrals
Complex Enduring Anxiety	10
Obsessive Compulsive Disorder	9
Trauma	8
Severe Depression (inc. suicide/self-harm)	8
Personality Disorder	5
Multiple Problems	4
Schizophrenia	3
Mania/Manic Depression	3

Table 7: Team Members Level of Satisfaction with the Psychology Service

Service Questions	Very Satisfied	Level of Satisfied	Satisfaction Dissatisfied	Very Dissatisfied
Ability to refer to psychology	73%	27%	0%	0%
Ability to gain psychological Perspective on cases	27%	55%	0%	0%
Psychologists work	9%	73%	0%	0%
Waiting Time	0%	64%	9%	9%
Psychologist involvement with Team	9%	64%	9%	0%

Table 8: Future Service Developments

Potential Development	Frequency of Response 1st Choice	2nd Choice
Team Training	8	1
Group-work with Team Members	1	6
Specialist Group-work	0	1
Work with Families/Carers	0	1
Discussion of Complex Cases	2	2

Figure 1: How Team Members make Referrals to Psychology

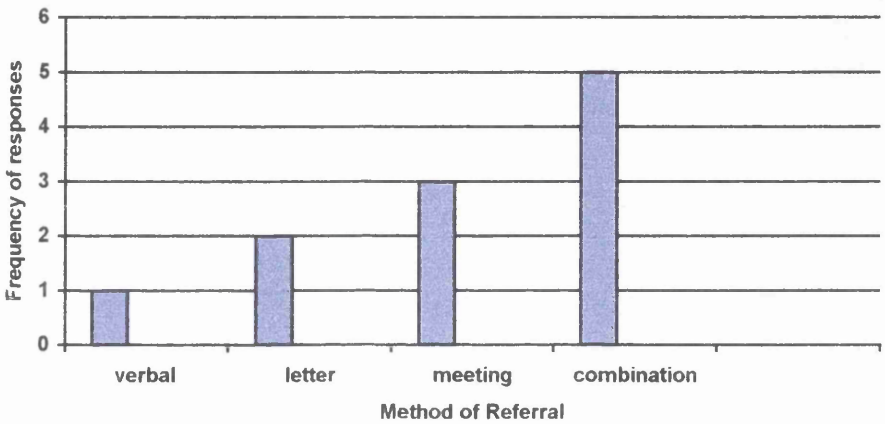
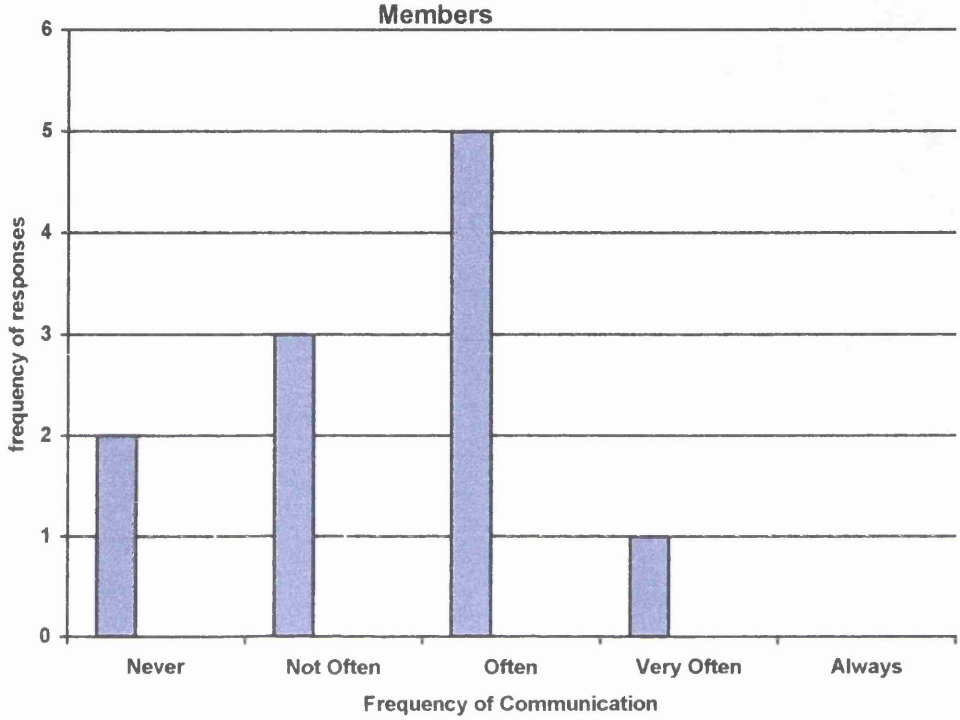


Figure 2: Level of Communication between Psychology and Team Members



MAJOR RESEARCH PROJECT LITERATURE REVIEW

The Impact of Hepatitis C on Injecting Drug Users and the utility of applying HIV research to develop Harm Reduction initiatives.

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University of Glasgow.

Written in accordance for submission to Addiction (author's notes in Appendix 2)

Introduction

The aim of this review is to describe Hepatitis C (HCV) and the impact which current research suggests it is having upon the Injecting Drug User (IDU) population. Prevalence figures among IDU's are initially outlined and possible risk factors for transmission of the virus highlighted. The second part of the review discusses the possibility of utilising existing HIV research including education and social cognition models of behaviour change (e.g. self-efficacy) in order to develop HCV harm reduction strategies.

Part One:

1. The Hepatitis C Virus:

Hepatitis C, previously known as Non A-Non B Hepatitis, was identified in 1989. It is a virus which makes its' home within the liver where it infects and damages cells. Physical symptoms of acute HCV include tiredness, nausea and general malaise. As these are common symptoms, HCV can remain unidentified for some time. If chronic HCV develops however, the health consequences can be potentially fatal. These include scarring of the liver, cirrhosis and possible liver failure. Chronic liver damage has been estimated as occurring in as many as 40-50% of people with Hepatitis C (English, 1997; Zuckerman, 1989). The proportion of serious health difficulties resulting from HCV and potentially presenting to the health service will therefore, be high.

2. HCV Prevalence among Injecting Drug Users:

Table 1 provides a review of recent research conducted in relation to HCV prevalence among IDU's. It outlines the prevalence statistics from each study and highlights the factors which have been linked with virus transmission. Although the majority of research has been conducted in America and Australia, British and European studies are now also beginning to emerge.

Insert Table 1 here

It is clear from the literature that HCV is now affecting injecting drug users on a much larger scale than the HIV epidemic. Almost all of the studies document HCV antibody among IDU's to be greater than 50%. Within the UK, average prevalence is estimated at 60% (Waller & Holmes, 1995), although infection rates seem to be particularly high within London and Glasgow where 71% and 77% prevalence has been documented respectively (Waller & Holmes, 1995; Goldberg et al 1998).

A number of factors are consistently linked with HCV status within the literature. These include *duration and frequency of injecting* (Crofts et al, 1993), and *co-infection with other viruses* (Patti et al, 1993; Van Ameijden et al, 1993; Van Beek et al, 1994; Bell et al, 1990). Drug users who have longer injecting histories and those who inject most frequently are more likely to contract HCV. This may reflect the cumulative frequency of occasions during which the user has potentially been exposed to the virus. Alternatively, co-infection with HIV and Hepatitis B may depict high overall levels of risk-taking behaviour within certain individuals.

Research also indicates that the majority of HCV transmission occurs within the first 6 years of injecting (Garfein et al, 1996). It is a cause of concern however, that the virus has also been found amongst recent onset injectors (Robinson et al, 1995; Carruthers & Loxley, 1995; Lamden et al, 1998). In one study, (Garfein et al, 1996) 64.7% of IDU's had contracted HCV within the first year of transition to injecting. This indicates that infection may occur almost immediately within the injecting history and requires that prevention strategies be targeted to initial stages of injecting and at those who may be at risk of commencing injecting.

There are however, a number of methodological difficulties within the current research. The majority of studies have been conducted with self-selected, treatment samples which are unlikely to be representative of the IDU population as a whole. The high level of variation between studies in relation to HCV prevalence is also difficult to explain. In order to develop a clearer picture of prevalence therefore, random sampling of IDU's from both treatment and community populations is needed. Comparison of the injecting practices between areas where high and low levels of prevalence have been documented may also help clarify virus transmission.

3. HCV Transmission among IDU's:

It is clear that transmission of HCV is occurring on a wide-scale among IDU's. A number of factors are thought to account for the continued high incidence of the virus among this population. Like HIV, HCV is contracted through bodily fluids, particularly blood-blood contact. Unsafe injecting practices are therefore thought to be the most usual transmission route. This includes sharing un-sterilised syringes,

and other injection paraphernalia including spoons, filters and rinsing water (Renton & Main, 1996). Although IDU's have reduced needle sharing risks in response to HIV, many continue to share other injection paraphernalia (Gossop et al, 1997; Strathdee et al, 1997). As HCV is believed to be transmitted more easily than HIV through sharing injecting equipment (Garfein et al, 1996; Wodack & Crofts, 1996) this continues to place IDU's at risk. Inadequate sterilisation of injecting equipment has also been highlighted as a possible HCV transmission route (Strathdee et al, 1997). The sterilisation recommendations for HIV are not adequate to protect against HCV (Bodsworth, 1994; McNeilly, 1996). Despite cleaning equipment therefore, drug users who are unaware of this may be inadvertently infecting themselves.

Research also suggests that HCV may be contracted through household transmission routes (e.g. blood spills, sharing a toothbrush/razor) (Renton & Main, 1996) and to a lesser extent through unprotected sexual intercourse (Tor et al, 1990). There is therefore a potential spread of HCV, as with HIV to the non-IDU population. This possibility is concerning as many studies indicate that IDU's have not readily reduced sexual risk behaviour (Hart et al, 1989; Needle et al, 1994; Rhodes & Stimpson, 1993; Des Jarlais, 1992; Stimpson, 1991). That the incidence of HCV remains negligible among the partners and families of infected IDU's (Tedder et al, 1991; Melbye et al 1990; Bresters et al, 1993) however, suggests that these transmission routes may be less effective.

In light of these findings, it is necessary for research to assess not only syringe sharing risks among IDU's but to extend methodology to include sharing of all kinds of injecting paraphernalia and household and sexual transmission. IDU's levels of awareness about HCV and regarding the sterilisation procedures required to protect against it should also be investigated. Subsequently, harm-reduction strategies must be extended to include information about the additional risks of sharing all kinds of injecting equipment and to advise IDU's regarding general HCV prevention.

Part Two:

Hepatitis C Harm Reduction Strategies:

With the absence of a cure or vaccination for HCV, control of the virus must currently be attempted through the *prevention of risk behaviours*. As HIV research has already addressed the issue of behavioural change within IDU's, it is possible that some existing theories may also be applicable to HCV. The present review focuses upon educational and psychosocial approaches to HCV prevention. The impact of medical interventions such as Methadone Maintenance is therefore not addressed.

1. HCV Awareness among IDU's:

HIV interventions initially attempted to reduce risk behaviours by increasing awareness of the disease. This involved the development of media/information campaigns (Robertson et al, 1988) and group educational programmes (McCusker et al, 1992). Although research outcomes initially demonstrated reduced injecting and sexual risk behaviour in response to awareness about HIV (des Jarlais, 1985, 1992;

Selwyn et al, 1987; Neagius et al, 1990; Stimson, 1991), failure to observe a relationship between HIV information and behavioural change was also frequently reported (Friedman et al, 1992, 1997; Stimson, 1988; Des Jarlais, 1992). Despite awareness being necessary therefore, to allow those at risk to contemplate responses, the association between information and risk reduction is often weak.

Few studies have been undertaken to assess IDU's level of awareness in relation to Hepatitis C. Studies which have addressed this issue have found that general levels of awareness concerning the virus are high (Carruthers & Loxley, 1995; current authors, 1999). IDU's also correctly perceive themselves as being at greater risk of contracting HCV in comparison with HIV (Carruthers & Loxley, 1997). However, specific knowledge of HCV transmission, symptoms and treatment has been described as "barely adequate" (Carruthers & Loxley, 1995). Recent research by the present authors (1999) also suggests that IDU's lack knowledge regarding the risks associated with sharing injecting paraphernalia, and that few are aware of the sterilisation procedures necessary to protect against HCV. Lack of information regarding effective HCV prevention may be a crucial factor in terms of continuing transmission.

In conclusion, although general awareness of HCV is high among IDU's, there is a need for interventions to focus upon increasing specific knowledge regarding disease transmission and prevention. Findings from HIV research suggest that it is initially important to elicit gaps in knowledge before tailoring interventions to meet individual groups needs (Fisher & Fisher, 1992). This may therefore be an

appropriate aim of localised HCV research. Although information about the virus is necessary to enable IDU's to protect themselves, evidence from HIV research suggest that it is unlikely that an increase in knowledge alone shall be sufficient to instigate or maintain widespread behavioural change.

2. Self-efficacy:

Bandura's theory of "self-efficacy" (1977) has become a widely applied construct within the addiction field. It has also formed part of some authors models of HIV Risk Behaviour change (Fisher & Fisher, 1992). Self-efficacy describes a person's perception of the level of control which they have over their behaviour; high self-efficacy beliefs reflecting increased confidence regarding behavioural control. High levels of self-efficacy are also thought to motivate a person to exert effort when faced with a challenge, whilst low levels may result in capitulation. In relation to injecting drug users therefore, those with high levels of self-efficacy regarding harm reduction may be more inclined to resist risk taking.

Self-efficacy can be developed from both mastery and by vicarious learning. Therefore, within treatment, it is often closely linked with the development of behavioural skills. Consequently interventions which aim to reduce IDU's risk behaviours are also usually increasing their self-efficacy with regards harm reduction.

In relation to HIV prevention, a number of studies have demonstrated an association between IDU's self-efficacy beliefs and risk behaviour. In terms of sexual risk

behaviour, Gibson et al (1988) found that IDU's with high levels of self-efficacy regarding HIV prevention were more likely to insist on condom use with their partners. Self-efficacy beliefs among IDU's have also been linked with safer injection practices including both the intention to use sterilised needles (.35) and reported clean needle usage (.46) (Kok et al, 1991).

Research has not yet addressed the question of whether a similar association exists between IDU's self-efficacy beliefs regarding Hepatitis C prevention and risk behaviour. If so, self-efficacy may be utilised as an important variable and measure by clinicians during treatment. Increasing self-efficacy with regards HCV prevention would include developing IDU's abilities to resist sharing injection paraphernalia and increasing their confidence in relation to effective sterilisation.

Whether increases in IDU's self-efficacy regarding HCV prevention would reduce virus prevalence is however, questionable. HCV may be spread too easily for small increases in individuals' self-efficacy to make an impact. Widespread behavioural change among IDU sub-cultures may alternatively, be necessary. It is also likely that risk taking is influenced by more than low levels of self-efficacy. Situational and interpersonal factors including the availability of sterile injecting equipment and peer group attitudes and response to HCV are also likely to be important.

3. Peer-group Influence:

In response to these individualistic perspectives of risk taking, a number of authors have argued for a more comprehensive view of risk behaviour which incorporates social influence processes (Stimson, 1988; Connors, 1992; Gilles & Carballo, 1990;

Rhodes et al, 1996). In line with this approach, Fisher & Fisher (1992) developed a model of HIV risk behaviour change which describes the possible influence of peer groups upon risk behaviour. They hypothesised that group pressures encourage drug users to practise either HIV risk or HIV prevention behaviour in concordance with group norms. This is thought to occur through a number of psychosocial processes including modelling, persuasion, conformity effects and fear of ostracism (Fisher & Fisher, 1992).

A number of studies have substantiated the existence of a positive association between IDU's risk behaviour and that of their peer group [Tross et al, 1989; Des Jarlais, 1985; Magura et al, 1989). Peer group influence has also been found to be important in terms of both initiation to injecting and undertaking harm reduction (Friedman, 1987). Research attempting to initiate community responses to risk reduction (Neaigus, 1994) has also demonstrated success in relation to reduced sharing of injecting equipment and increased efficacy of equipment sterilisation. Whilst being designed to reduce HIV risk behaviour, this intervention also succeeded in affecting some of the behavioural change required for Hepatitis C prevention.

From this literature, it can be expected that peer groups may similarly encourage either Hepatitis C prevention behaviour or Hepatitis C risk behaviour, dependent upon group norms. Further research is needed to describe the attitudes and response of subcultures of drug users to HCV. The influence of peer groups upon Hepatitis C risk behaviour and harm reduction also needs to be assessed. Following from this, it

may be useful to develop outreach programmes aimed at promoting HCV prevention within drug user community groups.

Can HIV research be applied to HCV?

This review has suggested that some elements of HIV research may usefully act as a guide for those undertaking future HCV prevention work with IDU's. This is indicated due to the many similarities between HIV and HCV for the IDU (transmission routes/lack of an effective treatment) making it a reasonable proposition that research in one field may be applicable in part to the other.

However, it would be naïve to assume that all interventions which have proven useful in terms of HIV shall do so in terms of HCV. A study by Crofts (1997) highlights this difficulty. Crofts (1997) found that Methadone Maintenance Treatment although useful in reducing transmission rates of HIV among injecting drug users made no similar impact upon transmission rates of HCV. Crofts explained this result in relation to the increased transmission rate of Hepatitis C compared with that of HIV. Similar difficulties have also been documented by Strathdee (1997) who found that despite implementation of a needle exchange in Vancouver, Hepatitis C prevalence among IDU's rose to 88%.

There is therefore a need for theories and research to be applied directly to HCV and not simply applied from HIV. The usefulness of interventions needs to be determined empirically, through research and tailored specifically to address HCV prevention. At present research upon Hepatitis C prevention among IDU's is sparse.

A concerted effort is needed to reduce prevalence and to prevent the spread of Hepatitis C among IDU's becoming endemic.

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Table 1 : Hepatitis C Prevalence among IDU's

Authors		Design	Results
UK Research			
Waller & Holmes N= 131 agencies, 2081 lab tests	1995	Survey of drug treatment agencies within the UK establishing HCV prevalence between countries.	UK average 60% HCV prevalence. Regional variation: London 71%, rest of of England 57%, Scotland 77%, Wales 48% N. Ireland 0%.
Serfaty et al N=202; 99 agreed to be tested.	1997	Survey of HCV prevalence among at risk drug users in London. Medical follow-up sample.	68% HCV prevalence among those tested. Age and history of needle sharing associated with positive HCV status.
Goldberg et al 1990 - N=295 1995 – N=370	1998	Comparison of HCV prevalence in Glasgow between 1990 and 1995.	Prevalence reduced from 90% - 77%.
Lamden et al N=773.	1998	Survey of HCV prevalence among drug users in Liverpool. Reterospective/cross-sectional design.	67% HCV prevalence. Risk factors include duration of injection history.
European Research			
Smyth et al N=735	1998	Survey of HCV prevalence among IDU's in Dublin. Cross-sectional design of those in contact with addiction agencies.	62% HCV prevalence. Risk associated with duration of injecting history and expenditure on drugs.
Stark N=324	1996	Survey of HCV prevalence among IDU's who practised 'Frontloading'.	94% HCV prevalence among IDU's who had frontloaded more than 100 times.
Esteban N=83; 83 agreed to testing.	1989	HCV prevalence among selected sample of IDU's who had taken part in a prior study.	HCV prevalence of 70%.
Girardi et al N=80	1990	Prevalence among IDU's attending methodone program in Rome.	HCV prevalence of 67%. Associated with duration and frequency of injecting.

Table 1 continued:

Authors		Design	Results
Patti et al N=645	1993	Prevalence among IDU's attending methodone maintenance clinics in Rome.	HCV prevalence 63%. Associated with HBV status.
Van Ameijden et al N= 305	1993	Longitudinal study of HIV/HCV in Amsterdam.	73% HCV prevalence. Associated with HIV status.
Van den Hoek N=304	1990	Longitudinal study of HIV/HCV in Amsterdam.	74% HCV prevalence. Associated with duration and frequency of injecting.
Bolumar et al N=1056	1996	Cross-sectional survey of injecting drug users attending a health centre in Valencia, Spain.	86% HCV prevalence. 69% prevalence among those injecting for less than one year.
Broers et al N=700	1995	Prospective cohort design. Drug users on a methodone maintenance programme in Switzerland.	29.8% HCV prevalence.
American/Canadian/Australian Research			
Crofts et al N= 410 ; 303 agreed to blood testing.	1993	Epidemiological study of Hepatitis C prevalence among IDU's in Victoria. Prospective design. IDU's contacted by community outreach.	68% IDU's seropositive for HCV. Risk associated with duration of injecting and prison history.
Crofts et al N= 1741	1997	Post hoc analysis of Hepatitis C prevalence among IDU's attending Methodone Maintenance Treatment between 1990-1995 in Victoria.	66.5% Hepatitis C prevalence. Incidence 22.2%. Reduction in HCV prevalence between 1991 (71.1%) and 1995 (52.3%).
Carruthers & Loxley N=234; 128 agreed to blood testing.	1995	Survey of young IDU's (aged 12-20yrs) in Perth. Structured questionnaire.	80% at risk from unsafe injecting practices. 5.5% HCV prevalence.

Table 1 continued:

Authors		Design	Results
Carruthers & Loxley N= 788	1997	Survey of HCV status and risk factors among IDU's in Perth. Cross sectional study of volunteers. Structured interview.	55% HCV prevalence. Risk associated with duration of injecting, use of opiates, treatment status and history of STD's.
Robinson et al N=110	1995	Prevalence study examining IDU's health records over a 2 year period.	77% HCV prevalence. Significant association with duration of injecting.
Selvey et al N=364	1996	Hepatitis C prevalence study of IDU's across 5 needle exchanges in Queensland. Self-report questionnaire.	34% self reported Hepatitis C prevalence. Range across exchanges 22%-74%. (2% HIV prevalence).
Garfein et al N=716	1996	Hepatitis C prevalence among IDU's in USA.	76.9% Hepatitis C prevalence. 64.7% in IDU's with less than 1yr injecting
Strathdee et al N=1006; first 500 given blood test.	1997	Hepatitis C prevalence in of IDU's attending needle exchange in Vancouver. Prospective cohort interviewed by community outreach workers.	88% Hepatitis C prevalence. High levels of sharing of injecting paraphernalia.
Van Beek et al N= 201	1994	Hepatitis C prevalence within IDU's attending a primary healthcare facility in Sydney. Retrospective data taken from medical files.	59% Hepatitis C prevalence. Associated with age, duration of injecting, use of opiates, sharing equipment and exposure to Hepatitis B.
Woodfield et al N= 110 IDU's 154 oral drug users.	1993	Hepatitis C prevalence within injecting and oral drug users in Aukland.	73% Hepatitis C prevalence within IDU's. 4% Hepatitis C prevalence within oral drug users.
Bell et al N=172	1990	Hepatitis C prevalence within IDU's in Sydney.	86% Hepatitis C prevalence. 2/3 prevalence of IDU's within first 2 years injecting. Associated with duration of injecting history and Hepatitis B status.

Table 1 continued:

Authors		Design	Results
Thomas et al N=1356	1995	Hepatitis C prevalence within IDU's in Baltimore.	88.7% Hepatitis C prevalence. Associated with duration of use, daily injecting and use of cocaine. No evidence of sexual transmission.
Donahue et al N=225	1991	Longitudinal study of IDU's in Baltimore.	85% Hepatitis C prevalence. Associated with duration of injecting.
Fingerhood et al N=446	1993	IDU's presenting at detoxification clinic in Baltimore.	86% Hepatitis C prevalence. Associated with HIV and HBV status.
Zeldis et al N=585	1992	IDU's presenting at drug treatment centre in California.	72% HCV prevalence. Associated with use of heroin and duration of injecting.

MAJOR RESEARCH PROJECT PROPOSAL

The Association between Injecting Drug Users Knowledge, Self-efficacy Beliefs, Peer-group Norms and Hepatitis C Risk Behaviour. .

Applicants:

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Prepared in accordance with guidelines in the Doctorate of Clinical Psychology Handbook. Guidelines based on the application for a Mini Project Grant in Health Services Research, (Guidelines in Appendix 3)

MAJOR RESEARCH PROJECT PROPOSAL

Title: The Association between Injecting Drug Users' Knowledge, Self-efficacy Beliefs, Peer Group Norms and Hepatitis C Risk Behaviour.

Summary

The prevalence of the Hepatitis C virus (HCV) is now widespread among injecting drug users (IDU's). Despite this, there is a lack of research into factors which may be important in terms of HCV risk behaviour and which may therefore guide prevention initiatives. The aim of the present study is to investigate the relationship between HCV risk behaviour and three factors which are often important determinants of risk behaviour - level of knowledge, self-efficacy beliefs and peer group norms. A structured questionnaire which assesses these variables in relation to HCV has been designed for use within the study. It is planned to interview 100 injecting drug users from both treatment and non-treatment samples. Participants for the study shall be recruited from treatment agencies and community outreach projects within the Lanarkshire area. It is expected that results from the study will provide information which is valuable to HCV prevention initiatives which are aimed at injecting drug users.

Introduction

HCV is now recognized as an infection affecting drug users often with very serious consequences and on a greater scale than the HIV virus. Over half of those who develop acute Hepatitis C go on to develop chronic HCV and 40-50% of these people develop chronic liver disease. Most prevalence studies among IDU's have found HCV antibody to be higher than 50% (Robinson et al 1995; Thomas et al 1995). Research indicates that up to 60% of IDU's in the UK have HCV and this rate increases to over 70% in London and Glasgow (Waller & Holmes, 1995).

In the absence of an effective treatment for HCV, control must be attempted through the reduction of HCV risk behaviours. In addition to needle sharing, potential sources of transmission may include the indirect sharing of spoons used for preparing drug solutions, cookers, filters and rinsing water. Studies also report evidence of the sexual transmission of HCV although the rate of sexual transmission of the disease is generally agreed to be low (Tedder, 1991; Renton, 1996; Alter, 1991). Nevertheless, research indicates the potential for drug users to contribute to the spread of HCV through sexual risk behaviour. Crisp (1993) found that although IDU's may adopt safe injection practices they still engaged in sexual risk behaviours which placed them at risk of developing both HIV and HCV.

Following from studies on HIV/Aids there is a vast research literature which identifies important determinants of behaviour change and which may usefully be applied to HCV.

Three important factors which have been discovered include knowledge, self-efficacy beliefs and peer-group norms.

1. Knowledge can be an important prerequisite to behaviour change as "individuals must have developed an awareness of a disease before they can be expected to form responses to it" (Brunswick, 1996). It is widely accepted however that knowledge is not usually sufficient to create behaviour change.

2. Self-efficacy models measuring a persons sense of control over their behaviour (Bandura, 1992), have been successfully applied within addiction and HIV research. It has been found that high self-efficacy is significantly related to safer injection practices (Falck, 1995) and that it is important in terms of both the change and maintenance of Aids risk behaviours.

3. Additionally, research on injecting and sexual risk behaviours has indicated the need to move beyond individual factors to take account of the importance of the social networks within which risk behaviours occur. In line with this work research indicates that perceived peer norms are important and highly associated with the performance of Aids risk behaviours (Kelly, 1994; Fisher, 1988). In relation to HCV risk behaviour a person's social network may therefore be either relatively consistent or inconsistent with the practice of risk behaviours and this may influence group members actions.

In summary therefore, there is an urgent need to control the continuing spread of HCV within the drug using population. As with HIV/Aids there is presently no vaccine or effective treatment for HCV and therefore the main way of reducing transmission is through behaviour change. The objective of the present study is to test the applicability of some determinants of Aids risk behaviour change to HCV risk behaviour. The importance of injecting drug users level of knowledge, self -efficacy beliefs and peer norms will therefore be measured in relation to their current risk behaviours.

Research Aims

The aim of the present study is to investigate the relationship between injecting drug users' level of knowledge, self efficacy beliefs and peer norms in relation to HCV risk behaviours. As a result is hoped to determine whether some of the research which has outlined the effective factors relating to HIV/Aids risk behaviour change may usefully be applied to work on the HCV virus. In conducting the study it is therefore, expected to provide information which is valuable to HCV prevention initiatives aimed at IDU's.

Research Hypotheses

1. It is hypothesized that level of knowledge about HCV will be associated with level of risk behaviour – those who have higher levels of knowledge are expected to engage in less risk behaviour than those who have lower knowledge levels.

2. It is hypothesized that self-efficacy beliefs will be associated with injecting risk behaviour. It is expected that IDU's who have higher levels of self-efficacy in relation to refraining from HCV risk behaviour shall engage in less risk behaviour than those who have low self-efficacy beliefs.

3. It is hypothesized that level of injecting risk behaviour will be associated with peer group risk behaviour/attitude to HCV. It is expected that higher levels of risk behaviour will be related to increased peer risk attitudes/behaviour.

Research Method and Design

Pilot Study

A pilot study will be carried out to improve the design and to test the validity of the questionnaire. The aim is to have 10 questionnaires completed at this stage.

Design:

Similar research undertaken in relation to HIV/Aids has relied upon convenience sampling from treatment centers. However, research indicates that information gathered solely from treatment samples provides an unrepresentative account of the level of risk behaviour evident in the drug injecting population (Rosenstock, 1988). In the present study therefore it is planned to gather information from both in-treatment samples and from injecting drug users who are not currently involved with treatment agencies. This shall be undertaken through contact with a number of treatment services and through contact with a variety of community outreach projects within the Lanarkshire area.

In terms of gathering information concerning previous risk behaviour, research indicates that it is useful to request information which is based on a specific time frame and that to improve reliability this should not exceed 1 year (Samuals, 1992). Questions regarding risk behaviour in the present study therefore, relate to the 6 months previous to interview.

Despite concerns, a variety of studies have demonstrated that injecting drug users provide relatively accurate self-report information (Samuals, 1992; Hammersley, 1994). Self-report responses also provide the most practical way of obtaining information from large samples and are widely used in this field. The information collected in the study will therefore, be based upon participant self-report.

Information will be gathered by interviews undertaken using a structured questionnaire. Prior to interview, client confidentiality will be assured and participants shall be informed that their taking part will have no bearing upon any treatment which they are undertaking. Additionally, participants will have the option to decline to take part in or opt out of the study at any point during the interview.

The dependent variable in the present study is 'risk behaviour'. This is measured by risk behaviour questions from the questionnaire. These questions are mainly presented on ordinal scales. The independent variables in the present study are knowledge, self-efficacy and peer group norms. These variables are also measured from the

questionnaire. An overall index of knowledge will be calculated by summing correct responses from the questionnaire. Questions relating to self-efficacy and peer group norms are presented on ordinal scales and overall scores will be calculated for each participant. Bivariate relationships between these variables will be tested followed by regression analysis to identify predictors of risk behaviour. The design of the study also involves comparison of these variables between groups (in treatment v's not in treatment).

Participants:

Inclusion Criteria: Drug users who have injected within the previous 6 months.

The aim of the study is to sample 100 injecting drug users.

Measures:

A questionnaire which assesses IDU's knowledge of HCV, peer norms, self-efficacy beliefs and recent risk behaviour has been designed (see Appendix 3). It may be altered in response to the outcome of the pilot study. Demographic information, drug history and HCV information (eg. Age, gender, length of injecting 'career' and current HCV status) has also been included as the literature suggests that it may have bearing upon the practice of risk behaviours.

Data Analysis

Data will be collated and analysed using the Statistical Package for Social Sciences. Descriptive statistics will initially be undertaken. The design of the study involves comparison between groups (in treatment v's not in treatment) which will involve t-tests if data is parametric. It is expected that the investigation of bivariate relationships between variables shall be measured using correlational analyses. In order to determine which, if any variables serve as predictors of risk behaviour, multivariate regression shall be undertaken. Additional factors which may influence the equation will be entered (e.g. age, length of injecting history, HCV status).

Practical Applications

It is expected that results from the study will have clear practical applications for both treatment agencies working with injecting drug users and in terms of HCV prevention initiatives. A general lack of knowledge about HCV may suggest the need for healthcare agencies to further promote information about HCV to drug users. If self-efficacy beliefs are influential, practitioners may wish to focus upon this factor during treatment programmes. Additionally, if peer group norms have a large influence on HCV risk behaviours, community outreach initiatives may wish to model and encourage HCV prevention behaviours within drug using groups.

Ethical Approval

Ethical approval shall be sought from the Ethics Committee at Lanarkshire Health Board.

Timescale:

		Expected Date of Completion
Literature Review	}	01.09.98
Data Collection	}	31.05.99
Data Analysis	}	31.06.99
Final Written Presentation	}	31.07.99

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MAJOR RESEARCH PROJECT PAPER

The Association between Injecting Drug Users Knowledge, Self-efficacy Beliefs, Peer-group Norms and Hepatitis C Risk Behaviour

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Written in accordance for submission to Addiction, (Author's notes in Appendix 4)

Abstract

Aims - To determine whether Hepatitis C knowledge, self-efficacy beliefs and peer group norms are associated with Hepatitis C risk behaviour among Injecting Drug Users (IDU's). **Design** – A correlational design was employed. The study also involved between-group analysis of IDU's who were receiving treatment and not receiving treatment. **Setting & Participants** - Eighty-one IDU's were recruited from Lanarkshire, Scotland. Fifty-eight were recruited from treatment agencies and twenty-three were recruited from a community sample by 'snowballing techniques'. **Measurement** - A questionnaire was devised to assess Hepatitis C knowledge, current risk behaviour, self-efficacy and peer-group norms. **Findings** - IDU's lack knowledge in relation to Hepatitis C prevention. Although few IDU's reported sharing needles many still share injecting paraphernalia placing them at risk of Hepatitis C. Hepatitis C status and peer group norms were modestly predictive of injecting risk behaviour. Self-efficacy beliefs were moderately predictive of sexual risk behaviour. **Conclusions** - It is necessary to educate IDU's regarding Hepatitis C prevention and the ongoing risks of sharing injecting paraphernalia. Community outreach interventions may be the most beneficial way of initiating a peer-based reduction in injecting risk behaviour.

Key Words: Injecting Drug Users, Hepatitis C.

Introduction

Hepatitis C (HCV) is now recognised as being widespread among injecting drug users (IDU's). Within the UK, average prevalence is estimated at 60%, although infection rates have been found to be higher within London and Glasgow where 71% and 77% prevalence have been documented respectively (Waller & Holmes, 1995; Goldberg et al 1998).

Unsafe injecting practices, including sharing syringes and other injecting paraphernalia (spoons, filters, rinsing water) are thought to account for continuing incidence of HCV (Renton & Main, 1996). Research has also linked transmission to duration and frequency of injecting (Crofts et al, 1993) and 'frontloading/backloading' practices [1](Stark et al, 1996). Although it is now thought to be less likely that HCV can be contracted through unprotected sexual intercourse (Tedder et al, 1991; Melbye et al, 1990; Bresters et al, 1993), 'household' transmission (e.g. blood spills, sharing razors/toothbrush) remains probable placing the partners and families of IDU's at a continued risk (Peano et al, 1992).

As there is currently no cure or vaccine for HCV, virus control must be attempted by the prevention of risk behaviour. Research focusing upon IDU's understanding of and response to HCV is therefore, now being undertaken. Initial outcomes suggest that although awareness of the virus is high, specific knowledge regarding HCV transmission, symptoms and treatment may be inadequate (Carruthers & Loxley,

[1] Frontloading' and 'Backloading' describe methods for dividing a drug solution by passing it from one syringe to another (Grund et al, 1990).

1995). Lack of information may therefore be important in relation to continuing transmission.

"Self-efficacy" (Bandura, 1977), reflecting perceived control over behaviour and peer group risk behaviour have also been recognised as important in relation to harm reduction among IDU's. Kok et al (1991) found that increased self-efficacy was positively correlated with both intention to use sterilised needles (.35) and reported clean needle usage (.46). Peer-group behaviour has also been found to encourage IDU's to engage in either risk or preventative action dependent upon group norms (Fisher & Fisher, 1992; Tross et al, 1989; Des Jarlais, 1985; Magura et al 1989). Although little is currently known about the influence of self-efficacy and peer-group norms in relation to HCV prevention, they may be expected to function in a similar way.

The current study describes a survey of IDU's from Lanarkshire, Scotland. Its aim was to assess knowledge regarding HCV, current risk behaviour, self-efficacy in relation to HCV prevention and peer group norms. It was hypothesised that increased knowledge/self-efficacy and lower levels of peer risk behaviour would be associated with lower levels of IDU risk behaviour (injecting/sexual). The study also included a comparison between "in-treatment" and "not in treatment" IDU's. It was hypothesised that IDU's who were not receiving treatment would be more likely to engage in risk behaviour than those who were receiving treatment (Hunter & Stimson, 1998). As self-report information from IDU's has been shown to be

relatively reliable (Samuals, 1992; Hammersley, 1992), data was obtained for the study using this method.

Method

1. Participants:

In total, eighty-one injecting drug users were interviewed. Fifty-eight were recruited from addiction agencies (methadone clinics/counselling) and comprised the in-treatment sample of IDU's. Twenty-three were recruited by a combination of methods including the snowballing technique'[2], attendance at local needle-exchanges and from waiting lists for addiction services. These participants were not receiving medical treatment or counselling for their drug use at the time of study and comprised the 'not in treatment' sample of IDU's. All participants who agreed to take part in the study completed the interview/questionnaire. Only two IDU's refused to take part in the study stating that they did not have time to do so.

2. Measures:

Hepatitis C Questionnaire - A questionnaire was developed by the principal researcher in order to assess participants' Hepatitis C knowledge, self-efficacy beliefs, risk behaviour and peer attitudes/behaviour (Appendix 3). Questionnaires have previously been designed to assess these variables in relation to HIV (Neagius et al, 1990; Kok et at, 1991; Magura et al, 1989), although none known to the author have been developed relating specifically to HCV. The questionnaire was constructed as follows -

[2] A technique where drug users who can be recruited introduce the researcher to other drug users who they are in contact with. A well-established method within drug research (Biernacki & Waldorf, 1981; Morrison, 1988).

Part 1: Demographic and Hepatitis C Information – This section of the questionnaire inquired about demographic information, Hepatitis C risk perception and perception of the seriousness of the virus in relation to other risks of drug use. It also asked about Hepatitis C status (if known) and acquaintance with others who have the virus.

Part 2: Knowledge – This scale contained sixteen questions and assessed knowledge about Hepatitis C. It included sub-scales pertaining to knowledge about Hepatitis C symptoms, treatment, transmission routes (injecting/household/sexual) and prevention (sterilisation). Questions were developed from information from the Hepatitis C Handbook (Dolan, 1994) and care was taken not to include questions which would require medical or specialist expertise. Participants answered each question by stating whether they thought it was "true" or "false". An overall "knowledge score" was calculated for each participant from correct responses on this measure, alongside scores for each knowledge sub-scale.

Part 3: Risk Behaviour - Containing seventeen items, this part of the questionnaire was designed to assess differing aspects of IDU's HCV risk behaviour. As research indicates that it is useful to request information about risk behaviour based upon a specific time-frame and not exceeding 1 year (Samuals, 1992), questions related to the 6 months prior to interview. Questions included age of initiation to injecting, duration of injecting history, current frequency of injecting and participation in "frontloading" and "backloading". These variables have been found to be associated with positive Hepatitis C status within the literature (Lamden et al, 1998; Serfaty et al, 1997; Van Beek, 1995). Questions also inquired about frequency of borrowing,

lending and cleaning used injecting equipment and paraphernalia (e.g. spoons/filters), and assessed sexual risk behaviour. Most risk behaviour questions were designed on a four-point ordinal scale ranging from "Not Often" to "Very Often". Client responses were scored in relation to individual risk questions and sub-scales were developed by totalling ordinal measures of injecting and sexual risk behaviour.

Part 4: Peer-group Norms – This section of the questionnaire contained ten items and was designed to assess peer attitudes and behaviour (peer-norms) in relation to Hepatitis C risk-taking. Questions were developed in accordance with recommendations for measurement of peer-group norms (Connor & Norman, 1996) and involved items relating to social pressure, peer risk behaviour, peer approval and peer disapproval. Responses were categorised on a five point ordinal scale. In addition to scores for individual items an overall "peer-norm" score was calculated by summing ordinal ratings for different HCV risks.

Part 5: Self-efficacy Beliefs – This scale was designed to assess participant's self-efficacy in relation to HCV prevention and was developed in accordance with recommendations for measurement of self-efficacy (Connor & Norman, 1996). It was constructed similarly to part four of the questionnaire and produced self-efficacy ratings for individual questions and an overall self-efficacy rating.

Cronbachs alphas for the constructs used to operationalise each dimension of the questionnaire are presented in Appendix 4. Analysis indicated that sexual risk

questions are best conceived of as a separate index of risk behaviour. Alpha ratings for "peer-group norms" and "injecting risk behaviours" were slightly below recommended levels (Clark & Watson, 1995) indicating that these scales may benefit from being adapted for future research.

3. Procedure -

Pilot Study – In order to pilot the questionnaire ten participants were initially interviewed. At this time some changes to the questionnaire design were made (Appendix 4). As major alterations were not required, completed questionnaires from these participants were included within the final sample.

Study - After being introduced to the researcher, IDU's were given verbal and written information about the study, its aims and requirements (Appendix 3). Study inclusion criteria involved having injected at least once within the six months prior to interview. Participants were assured of confidentiality and following agreement to comply completed a research consent form (Appendix 3). They then undertook the fifteen-twenty minute semi-structured interview with the principal researcher and completed the questionnaire.

Results

Demographic information is presented in Table 1. In total, eighty-one IDU's were interviewed, fifty-eight of whom were in treatment and twenty-three who were not receiving treatment at the time of study. Seventy-three of those interviewed were male whilst nine were female. The mean age of participants was twenty-eight (range

18-45). Most were unemployed (91%), single (51%) and had attained no school qualifications (49%). Six percent reported that they were 'homeless' at the time of study.

Insert Table 1 here

All of those who were interviewed stated that they were aware of Hepatitis C. Sixty percent defined the virus as "very serious" compared with the other risks involved in drug use. Only 5% considered HCV to be "not-serious". Risk perception varied among participants with 48% stating that it was "very unlikely" they would develop HCV, 20% stating it was "likely" and 32% stating it was "very likely". Seventy three percent of those interviewed knew someone who had HCV and 42% of the sample had themselves been tested. Of those tested, 38% reported being HCV positive. Being acquainted with others who have the virus was associated with diagnosis of HCV ($r=.31$; $p< .001$), as was duration of injecting history ($r=0.19$; $p< .05$), (Table 2).

Insert Table 2 here

Predictors of Injecting and Sexual Risk Behaviour - In order to test the main hypothesis, bivariate relationships between injecting/sexual risk behaviour, and knowledge, self-efficacy and peer-group norms were examined using Kendall's Tau-b correlation (Table 2). Outcome from this analysis indicated that peer injecting risk behaviour was modestly associated with injecting risk behaviour ($r=0.21$, $p<0.05$). Sexual risk behaviour was found to be negatively associated with sexual risk self-

efficacy ($r=-0.54$, $p<0.001$), and was positively associated with peer sexual risk behaviour ($r=0.29$, $p<0.01$).

Multiple stepwise regression was also conducted in order to determine any predictors of injecting and sexual risk behaviour. Age, duration of injecting history, risk perception and HCV status were also included within this analysis. The resulting model identified HCV status and peer risk behaviour as predictors of IDU risk behaviour ($r2= 16.8$, Adj. $r2=14.7$, $p<0.05$), (Table 3). These factors accounted for 15% of the variance. In relation to sexual risk behaviour, self-efficacy was identified as the single predictor within the model ($r2= 0.23$, Adj $r2 = 31.0$, $p<0.001$), accounting for 31% of the variance (Table 3).

Insert Table 3 here

HCV Knowledge – Although knowledge of HCV was high overall (mean correct responses=11), incorrect responses were frequently given in relation to Hepatitis C prevention questions [mean correct responses = 2 (50%)]. Thirty-two percent of participants also underestimated the consequences of HCV believing treatment to be 'very effective' and that they could be vaccinated against the virus. There were no significant differences between IDU's who were receiving and not receiving treatment in relation to HCV knowledge (Table 4).

Insert Table 4 here

Risk Behaviour - The mean age of initiation of injecting amongst the sample was twenty-three, and mean duration of injecting was five years (see Table 5). Participants who were receiving treatment were found to have a significantly longer

injecting history than those who were not receiving treatment ($p<0.01$) but reported injecting significantly less frequently ($p<0.05$) (Figure 1).

Insert Table 5 & Figure 1 here

Most participants reported that they had not borrowed used needles in the six months prior to interview (Figure 2). Sharing injecting paraphernalia (e.g. spoons/filters) was however, frequently reported (mean no. of occasions =33, median =2). IDU's who were not receiving treatment reported significantly higher levels of sharing injecting paraphernalia than those who were in-treatment ($p<0.01$) (Figure 3). Many IDU's (39%) who shared paraphernalia reported that they did "not often" clean it before use. Only seven percent sterilised paraphernalia with bleach, (the recommended procedure to prevent against HCV).

Insert Figures 2 & 3 here

High levels of sexual risk behaviour were also reported within the current study (Figure 4). Nineteen percent of IDU's reported having sex "often" without using a condom and 24% "very often".

Insert Figure 4 here

<u>*Self-efficacy*</u> – There were no statistical differences between IDU's who were receiving treatment and those who were not receiving treatment in relation to self-efficacy (Table 4). High levels of self-efficacy were reported in response to most risk behaviour questions (see Appendix 4). Lower levels[3] of self-efficacy were

[3] Responses of 'Completely untrue' and 'Mainly untrue'.

documented by some IDU's however, in relation to sexual risk behaviour (33%) and sterilisation of injecting paraphernalia (32%).

Peer-group Norms – There was a large degree of variability between IDU's responses in relation to peer norm questions (s.d.=6.0) (see Appendix 4), suggesting differences in the attitudes/behaviours of peer groups. No statistical differences were found between IDU's who were receiving treatment and those who were not receiving treatment in relation to peer group norms (Table 4). 'Peer risk behaviour' was most frequently reported in relation to engaging in unprotected sexual intercourse (76%), sterilisation of used syringes (75%) and of paraphernalia (51%). Most IDU's (74%) reported that peers did not put them under social pressure to use borrowed injecting equipment, although 60% said that they felt under some degree of pressure to lend equipment. A high percentage of IDU's (40%) reported that peers would not 'disapprove' if they re-used equipment without cleaning it.

Discussion

Results from the current study suggest that, although IDU's are aware of HCV and perceive it to be a serious problem, continued injecting risk behaviour places many at risk. Few participants reported sharing needles/syringes. However, as documented within other studies (Gossop et al, 1997; Strathdee et al, 1997), most acknowledged sharing injecting paraphernalia (spoons/filters). Failure to modify these risk behaviours suggests that many IDU's may be unaware of the substantive risk of contracting HCV through shared injecting paraphernalia. It is also of concern that reported methods of sterilising injecting equipment were often inadequate to protect

against HCV (bleach was not commonly used). Outcome from the HCV knowledge questionnaire confirmed that many IDU's lacked accurate information regarding HCV prevention. This finding concurs with previous research (Carruthers & Loxley, 1997) and indicates the necessity for information campaigns to focus upon improving specific knowledge in relation to HCV prevention.

HCV status and peer injecting risk behaviour were found to be modestly predictive of injecting risk behaviour. This finding adds some credence to the argument that IDU's risk behaviour concurs with that of peers (Fisher & Fisher, 1992). It also suggests that IDU's who have HCV may be more inclined to reduce injecting risk behaviour. Both identified variables however, only accounted for a small proportion of the total variance and therefore have limited explanatory power. Other factors, which were not assessed, are also likely to be important in relation to injecting risk behaviour including needle-exchange provision within the area.

Findings did not substantiate the hypotheses that level of knowledge and self-efficacy beliefs would also be associated with injecting risk behaviour. Most IDU's reported high levels of self-efficacy and had a high level of knowledge despite engaging in risk behaviour. This concurs with outcome from HIV research suggesting that knowledge alone is unlikely to instigate behavioural change (Friedman et al, 1992, 1997). That many IDU's had high levels of self-efficacy regarding future harm reduction despite currently engaging in risk behaviour is perplexing. However, responses may depict their *intention* to reduce injecting risks rather than being representative of their current behaviour.

Sexual risk self-efficacy was moderately predictive of sexual risk behaviour. These variables were also strongly negatively correlated, as initially hypothesised. This indicates that IDU's who have high levels of sexual risk self-efficacy are less likely to have sexual intercourse without using a condom. In contrast with self-efficacy for injecting risk behaviours, many IDU's within the study reported low levels of sexual risk self-efficacy. A high proportion also reported engaging in frequent sexual risk behaviour. These findings concur with outcomes from previous research (Needle et al, 1994; Rhodes & Stimpson, 1993; Des Jarlais et al, 1992) indicating that IDU's have not readily reduced sexual risk behaviour, and suggesting that they are not confident about their propensity to do so. Although most research suggests that HCV is infrequently transmitted sexually (Tedder et al, 1991; Melbye et al, 1989; Bresters et al, 1985), sexual risk behaviour continues to constitute a risk in relation to HIV. These results are concerning therefore, and suggest that harm reduction campaigns should continue to emphasise the importance of practising safe sex to IDU's and their partners.

The hypothesised between treatment group differences in relation to injecting risk behaviour were mainly supported. IDU's who were receiving treatment reported injecting, and sharing paraphernalia significantly less frequently than those who were not receiving treatment. As most of the IDU's who were receiving treatment were being prescribed methadone, this finding adds strength to existing evidence indicating that methadone maintenance reduces both injecting drug use, and injecting risk behaviour (Ward et al, 1992; Caplehorn & Ross, 1995).

Thirty-eight percent of participants who had been tested for HCV reported to the researcher that they were HCV positive. This percentage is low in relation to outcomes from prevalence studies which commonly document 60%-80% HCV prevalence (Waller & Holmes, 1995; Lamden, 1998, Goldberg, 1998). It bears similarity however, to outcome of a prevalence study (33%) conducted within the same locality during the previous year (Taylor & Farquhar, 1998).

In concurrence with findings from other HCV research, positive HCV status was associated with duration of injecting history (Lamden, 1998; Smyth, 1998; Van den Hoek, 1990; Carruthers & Loxley, 1997). That IDU's who have a longer injecting history are more likely to have HCV, may reflect the cumulative frequency of occasions during which they have potentially been exposed to the virus. HCV status was also associated with knowing someone who has the virus, possibly indicating peer transmission. Unlike other studies, HCV status was not found to be associated with frequency of injecting, frequency of borrowing used needles or frontloading/backloading (Stark, 1996). As the current study was not primarily designed to measure transmission, and most of the IDU's interviewed were unaware of their HCV status, it is likely it was not sensitive enough to detect these relationships.

Low levels of self-efficacy and increased peer-group risk behaviour were most frequently reported in relation to engaging in sexual risk behaviour and sterilisation of injecting equipment. This suggests that IDU's may be less confidant regarding reducing these kinds of risk and indicates that peer norms could be reinforcing them.

Many IDU's also reported low levels of peer disapproval in relation to use of un-sterilised injecting equipment. Lack of peer disapproval in response to risk behaviours may be indirectly reinforcing their practice. Community outreach interventions may therefore be necessary in order to modify both the attitudes and behaviour of IDU's and their peer-groups in relation to adequate sterilisation of used injecting equipment. Widespread behavioural change within the IDU community is also required in order to reduce sharing of injecting paraphernalia. It is possible that modification of these kinds of risk behaviour will reduce transmission of HCV.

Methodological difficulties within the current study include its reliance on self-report information and omission of objective measures. Although research suggests that self-report information from IDU's is relatively reliable (Samuals, 1992; Hammersley, 1992), many participants were interviewed following a medical appointment and may have been wary regarding the confidentiality of their responses. This could have caused them to under-report injecting risk behaviours. As sharing injecting equipment is also perceived as being a stigmatised activity (Hunter & Stimson, 1998), some IDU's may not have been willing to fully disclose the extent of their risk behaviour. These factors make it difficult to determine the accuracy of the information gathered during the study. It may therefore, have been useful to include objective measures of drug use (e.g. urine samples/medical records) in order to validate some aspects of the information reported.

The study also included a small number of female participants resulting in findings being unlikely to generalise to female IDU's. The proportion of female IDU's

recruited (10% of the sample) is unlikely to reflect actual differences in the percentages of female and male IDU's. Alternatively, it is recognised that females may be less likely to seek treatment and to present to services for illicit drug use, due to both stigma and fears that children may be taken into care. Future research should therefore, try to identify ways of increasing recruitment of female IDU's.

The study involved development of a questionnaire designed to measure, in relation to HCV, some of the psychosocial predictors of HIV risk behaviour. Although the validity and reliability of this scale remains in question, the authors hope to further develop and standardise it within future research.

Conclusions and recommendations from the current study, include the necessity for interventions to increase IDU's understanding of HCV prevention and the transmission risks involved in sharing injecting paraphernalia. Findings did not wholly support the original hypothesis that HCV risk behaviour would be associated with level of knowledge, self-efficacy beliefs and peer-group norms. Hepatitis C status and peer-group norms were however, modestly predictive of HCV risk behaviour. Taking account of the social context of injecting risk behaviour, community outreach interventions may therefore, prove to be the most beneficial way of initiating risk behaviour change. As findings suggest that low levels of peer pressure to refrain from HCV risk behaviours are currently operating however, it is likely that this will require a concerted effort on behalf of treatment agencies.

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Table 1: Demographic Information

Variable	In-treatment N=58	Out of treatment N=23	Total Sample N=81
Age			
Mean (yrs)	28	28	28
Range (yrs)	25 (18-43)	26 (19-45)	27 (18-45)
Gender			
Males	90%	91%	90%
Females	10%	9%	10%
Age Left School			
Mean (yrs)	16	16	16
Marital Status			
Single	59%	39%	53%
Married	10%	30.5%	16%
Other	31%	30.5%	31%
Accommodation			
House/Flat	93%	96%	94%
Homeless	7%	4%	6%
Qualifications			
None	48%	52%	49%
O/Standard Grades	34%	40%	36%
Highers	7%	4%	6%
Further Education	10%	4%	9%
Occupational Status			
Employed	3%	9%	6%
Unemployed	91%	91%	91%
Further Education	5%	0%	3%

Table 2: Kendall's Tau-b Correlations: *

Variables:	No. of Respondents	Kendall's Tau-b	Significance Level
1. Injecting Risk Behaviour & Knowledge	81	-0.07	non-significant
2. Injecting Risk Behaviour & Self Efficacy	81	-0.13	non-significant
3. Injecting Risk Behaviour & Peer Norms	81	0.21	p<0.001
4. Positive HCV Status & Friends with HCV	81	0.31	p<0.001
5. Positive HCV Status & Duration of Injecting History	81	0.19	p<0.05
6. Sexual Risk Behaviour and Sexual Risk Self-efficacy	81	-0.54	p<0.001
7. Sexual Risk Behaviour and Peer Sexual Risk Behaviour	81	0.29	p<0.01

* Two-tailed correlation's were selected as associations between the variable were not predicted prior to data analysis.

Table 3: Regression Analyses (Stepwise) for Injecting and Sexual Risk Behaviour:

Outcome Variable	F ratio	P	R2	Adj R2	Explanatory Variables *(P)*
1. Injecting Risk Behaviour	7.87	0.005	16.8	14.7	Hepatitis C Positive (0.005) Increased Peer Group Risk Behaviour (0.005)
2. Sexual Risk Behaviour	36.9	0.001	32.8	31.0	Lower Self-Efficacy (0.001)

1. *Excluded Variables: Age, Treatment Group, Risk Perception, Injecting History, Acquaintances with Hepatitis C, Self-efficacy Beliefs and Hepatitis C Knowledge.*

2. *Excluded Variables: Age, Treatment Group, Hepatitis C Knowledge, Peer Sexual Risk Behaviour, Hepatitis C status.*

Table 4: Mann Whitney U Analysis of Between Group Differences

Variable	N	Mean Rank	Sum of Ranks	Mann Whitney U	z	P
Duration of Injection History:						
In Treatment	58	46.59	2702	343	-3.4	0.001
Not in Treatment	23	26.91	619			
Frequency of Injecting						
In Treatment	58	37.50	2175	464	-2.5	0.028
Not In Treatment	23	50.91	1171			
Frequency of Borrowing Needles/Syringes						
In Treatment	58	38.97	2260.5	549	-1.1	non-significant
Out of Treatment	23	46.11	1060.5			
Frequency of Borrowing Spoons/Filters3						
In Treatment	58	36.80	2134	423.5	-2.6	0.008
Not in Treatment	23	51.59	1186			
Hepatitis C Knowledge						
In Treatment	58	41.2	2389.5	655.5	-1.2	non-significant
Out of Treatment	23	40.5	931.5			
Peer Group Risk Behaviour						
In Treatment	58	42.61	2471.5	573.5	-0.9	non-significant
Out of Treatment	23	36.93	849.5			
Self-efficacy						
In Treatment	58	39.06	2265.5	554.5	-1.2	non-significant
Out of Treatment	23	45.89	1055.5			

Table 5: Injecting Risk Behaviour

Variable Sample	In-Treatment	Out of Treatment	Total
Age began injecting:			
Mean	22	24	23
Sd	5.5	7.3	6.1
Duration of Injecting History (yrs)*:			
Mean (yrs)	5	2	5
Sd	6	4	6
Freq borrowed needles (6 months):			
Mean (no. of times)	6	11	8
Median	0	2	0
Range	97	120	120
Freq lend needles (6 months):			
Mean (no. of times)	8	10	8
Median	2	0	2
Range	90	150	150
Frequency Borrowed spoons/filters (6 months):*			
Mean (no. of times)	5	105	33
Median	1	10	2
Range	60	600	60

* P<0.01 Mann Whitney U

Figure 1: Percentage of IDU's Injecting in 6 months Prior to Study

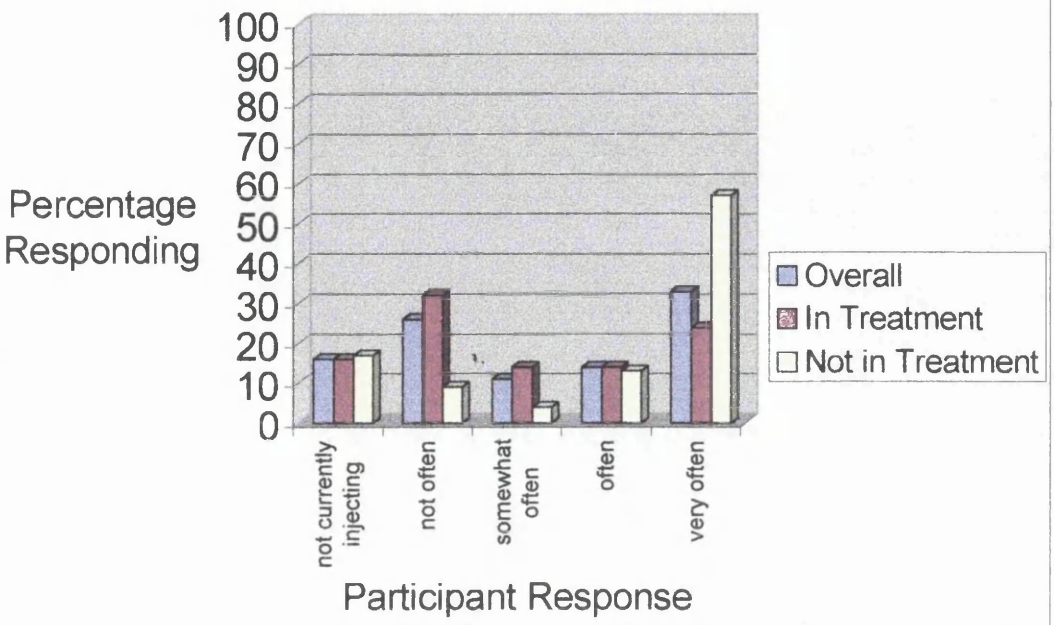


Figure 2: Percentage of IDU's Borrowing Needles/Syringes in 6 Months Prior to Study

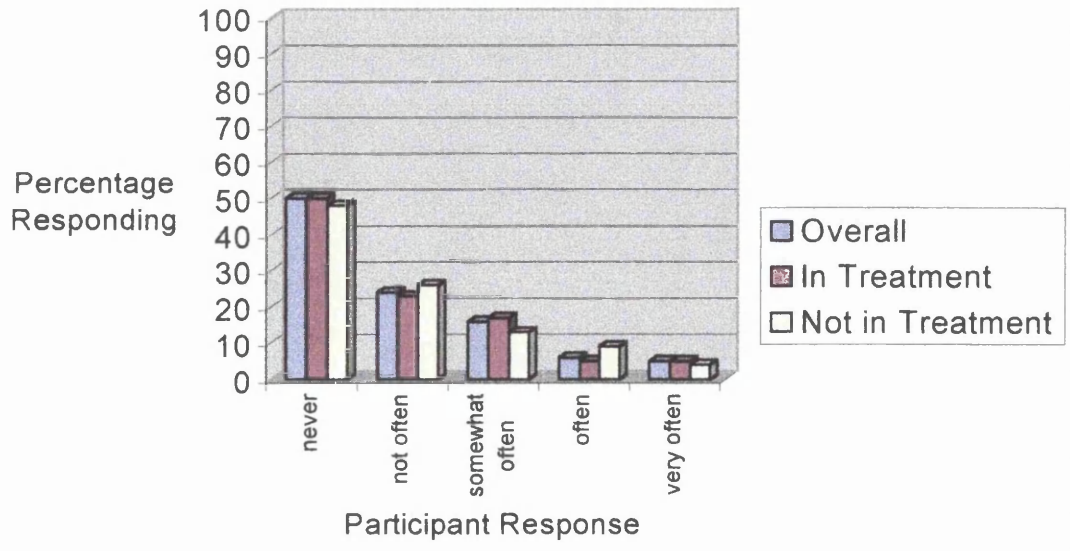


Figure 3: Percentage of IDU's Borrowing Injecting Paraphernalia in the 6 Months Prior to Interview

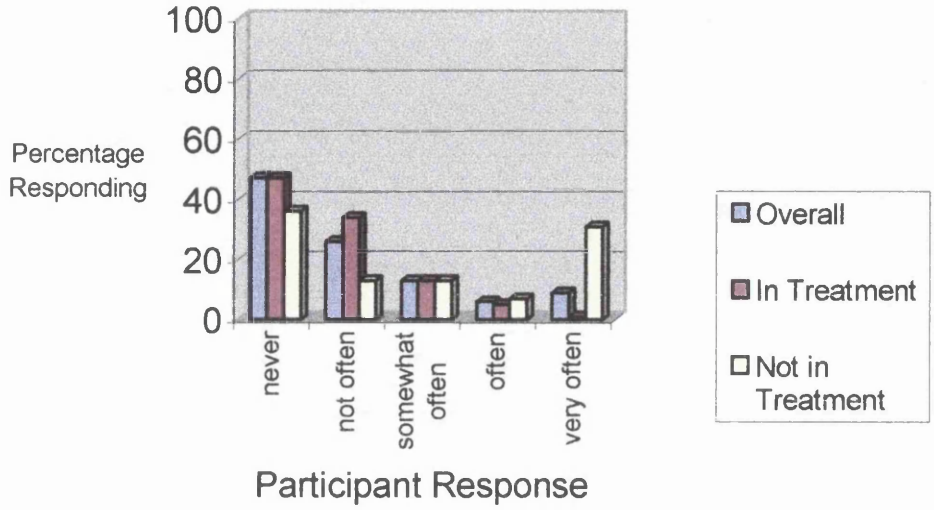
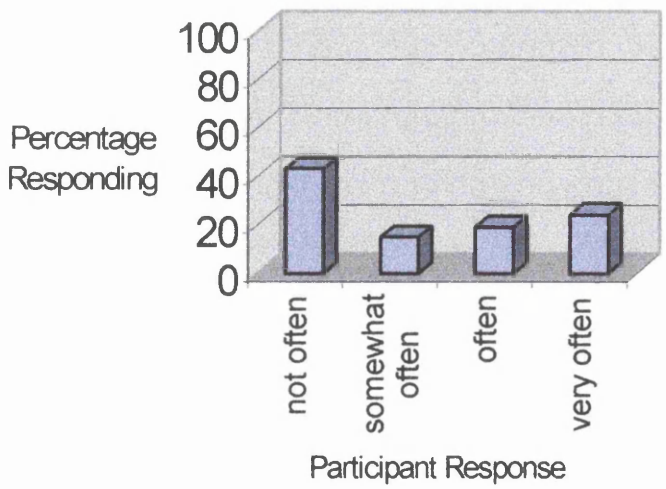


Figure 4: Percentage of IDU's Engaging in Sexual Risk Behaviour



CLINICAL CASE RESEARCH STUDY 1 (ABSTRACT)

Psychological Management of Mania for a Client with concurrent Learning Difficulties

Lisa Cameron, Department of Psychological Medicine,
University of Glasgow.

Written in accordance for submission to Journal of Intellectual Disability Research

Abstract

Background The following individual case study involved psychological treatment of Bipolar disorder in a client with a concurrent learning disability. Despite the finding that approximately 6% of people with learning disabilities also have a serious mental health difficulty, research has often neglected to apply psychological treatments of serious mental illness to learning disabled clients. **Method** In the present study, a psychological intervention for Bipolar disorder involving both Prodromal Symptom Monitoring and an Inpatient Family Intervention was adapted to the level of understanding and social context of a learning disabled client. **Results** Treatment outcome was favourable, demonstrating improvement in terms of reduced relapse and increased coping. These gains were maintained at 9 months follow-up. **Conclusion** The author concludes that further application of these interventions for clients with a dual diagnosis of learning disability and serious mental illness is merited.

Key words: Bipolar Disorder, Intellectual Disability.

CLINICAL CASE RESEARCH STUDY 2 (ABSTRACT)

Treatment of Urinary Urgency in a Ten Year Old Boy using Combined Bladder Retention Training and Cognitive-Behaviour Therapy.

Lisa Cameron, Department of Psychological Medicine,
University of Glasgow.

Written in accordance for submission to Clinical Child Psychology and Psychiatry

Abstract

This single case study involved Cognitive-Behaviour therapy for Urinary Urgency in a 10-year old boy. Urinary Urgency is infrequently documented in both the adult and child literature, although enuresis a similar condition does commonly occur within childhood. Treatment was undertaken during 6 sessions. It followed the Cognitive-Behaviour therapy format for children described by Kendall (1994), and also involved Bladder Retention Training. Treatment outcome demonstrated reduction in both anxiety and depression measures. Avoidance behaviours were also substantially reduced whilst ratings of 'confidence over bladder control' improved. Treatment gains were maintained at 6 months follow-up. Outcome from this case study suggests that coupled with Bladder Retention Training, Cognitive-Behaviour therapy can be successfully applied to Urinary Urgency problems within childhood.

Key Words: Childhood Urinary Urgency, Cognitive-Behaviour Therapy

CLINICAL CASE RESARCH STUDY 3 (ABSTRACT)

Comparison of a Standard Anxiety Management Programme for Older Adults with a Tailored Anxiety Management Programme.

Lisa Cameron, Department of Psychological Medicine,
University of Glasgow.

Written in accordance for submission to International Journal of Geriatric Psychiatry

Abstract

The current study compared a standard group anxiety management programme for older adults with a group anxiety management programme which was tailored to address the types of anxiety which commonly present in late life. Each programme followed a Cognitive-Behavioural approach and was undertaken over 8 weekly sessions. The tailored group programme included topics such as death anxiety, anxieties about ill-health and fear of violence. Outcome from both treatment groups were compared with a waiting list control. Overall, results suggested that group anxiety management can reduce anxiety symptoms for some older adults. Slightly more improvement was demonstrated by clients who took part in the tailored group programme, suggesting that it may be beneficial to adapt anxiety management for older adults. The symptoms of participants in the waiting-list control group did not evidence change suggesting that improvement made by those in the treatment conditions occurred as a result of intervention. Outcome from the case study is discussed in relation to the current literature.

Key words: Anxiety Management, Older Adults.

Appendix 1:

Small Scale Service Evaluation Project

1. Authors Notes – Clinical Psychology Forum

2.Questionnaire

Clinical Psychology Forum

Clinical Psychology Forum is produced by the Division of Clinical Psychology of the British Psychological Society. It is edited by Steve Baldwin, Lorraine Bell, Jonathon Calder, Lesley Cohen, Simon Gelsthorpe, Laura Golding, Helen Jones, Craig Newnes, Mark Rapley and Arlene Vetere and circulated to all members of the Division monthly. It is designed to serve as a discussion forum for any issues of relevance to clinical psychologists. The editorial collective welcomes brief articles, reports of events, correspondence, book reviews and announcements.

Notes for contributors

Articles of 1000-2000 words are welcomed. Shorter articles can be published sooner. Please check any references. Send two copies of your contribution, typed and double-spaced. Contributors are asked to keep tables to a minimum; use text where possible.

News of Branches and Special Groups is especially welcome.

Language: contributors are asked to use language which is psychologically descriptive rather than medical and to avoid using devaluing terminology; i.e.: avoid clustering terminology like "the elderly" or medical jargon like "schizophrenic". Articles submitted to **Forum** will be sent to members of the Editorial Collective for refereeing. They will then communicate directly with authors.

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August, 1997.

To, Members of the Hamilton Community Mental Health Team,
The Psychology department is keen to discover your views and ideas about its service to the Hamilton Community Mental Health Team. In order to do this it would be helpful if you could take a few minutes of your time to answer the following questions. (All responses are confidential).

1. Which of the following do you consider to be the main direct role(s) of Clinical Psychology within the Community Mental Health Team?
(Please tick up to five roles and rate their importance (e.g. 1= most important role, 2= second most important, 3= third most important etc.)

	Tick	Rating
Individual work with Clients		
Discussion of New Referrals at Allocation meeting		
Recommendation of Appropriate Therapy or course of Action		
Psychological Assessments		
Assessment of Memory and Cognitive functioning		
Groupwork		
Work with families, carers and staff		
No Roles		
Other (please specify)		

2. Which additional indirect role(s) could Clinical Psychology undertake?
Please tick up to five roles and rate their usefulness (e.g 1=most useful role, 2 = second most useful role etc.)

	Tick	Rating
Education/Health Promotion work (community)		
Team training in Psychological issues		
Audit of CMHT service		
Research work		
Consultation work with team members		
Supervision with team members		
No Roles		
Other (please specify)		

3. Which types of CMHT cases do you most often refer to Clinical Psychology?

Please tick the five most frequent types of case and rate (e.g. 1= most frequent type of case, 2 = second most frequent type of case etc.)

	Tick	Rating
Schizophrenia		
Severe Depression		
Complex, Enduring Anxiety		
Mania or Manic Depression		
Obsessive Compulsive Disorder		
Paranoia		
Personality Disorders		
Trauma (incl. Sexual Abuse)		
Multiple Problems (ie mania + relationship difficulties)		
Other (please specify)		

4. Why do you choose to refer these particular cases to Psychology?

Please tick the three most usual reasons and rate them (e.g. 1= most usual reason, 2= second most usual reason etc.)

	Tick	Rating
Psychological type problem		
Complexity of case		
Alternative opinion		
Additional professional back-up		
Enduring problem		
Earliest available appointment		
Other (please state)		

5. How do you usually make referrals to Clinical Psychology within your team?

Please tick the most frequent referral procedure

	Tick
Speak with	
Write to	
Complete Referral Form	
Allocation meeting	
Combination of Above (please specify)	

5. How often do you communicate with Clinical Psychology regarding team cases which you are both working on?

Never	Not Often	Often	Very Often	Always

6. How satisfied are you with the following aspects of the psychology service within your team?-

Please choose from the following terms -

Very Satisfied	Satisfied	No opinion	Dissatisfied	Very Dissatisfied
1	2	3	4	5

a) Ability to refer to psychology ----------
b) Opportunity to access a psychological perspective on cases ----------.
c) Psychological work undertaken with the seriously mentally ill ----------
d) Waiting time to see psychologist ----------
e) Degree of Psychological involvement in team ----------

7. In which of the following ways would you like to see the psychology service developed?

Please rate your first and second choice.

	Rating
Staff training in psychological issues	
Ongoing groupwork with Team members e.g. Relapse Prevention	
Specialist groups e.g.hearing voices sufferers or depression	
Work with family/carers	
Formal meetings for discussion of complex cases	
Other Development (please specify)	

Thank you for your help.

Appendix 2:

Major Research Project Literature Review

1. Authors Notes – Addiction

Addiction

Guidance to Authors

The editorial staff will be most grateful for your assistance in relation to the matters listed below. Please follow this guidance carefully when preparing a submission.

General matters

Addiction is a refereed journal. Its goal is to serve international and interdisciplinary scientific and clinical communication, to strengthen links between science and policy, and to stimulate and enhance the quality of debate. Submissions are sought which are not only technically competent, but are original and contain information or ideas of fresh interest to our international readership. Books and major reports may be submitted for review, and material for the News and Notes section is welcomed. We seek to serve the developing as well as the developed world. We aim to handle submissions courteously and promptly, and welcome dialogue with our contributors and readers. We regret that we are not able to return manuscripts.

Ethical standards

Manuscripts are accepted on the understanding that they are subject to editorial revision. Submissions must be accompanied by a signed statement from all authors saying that: (a) the material has not been published in whole or in part elsewhere; (b) the paper is not currently being considered for publication elsewhere; (c) all authors have been personally and actively involved in substantive work leading to the report, and will hold themselves jointly and individually responsible for its content; (d) all relevant ethical safeguards have been met in relation to patient or subject protection, or animal experimentation. This statement must also declare sources of funding, direct or indirect, and any connection with the tobacco, alcohol or pharmaceutical industries. With regard to points (a) and (b): if data from the same study are reported in more than one publication, this should be stated in the manuscript and/or covering letter to the editor, along with a clear explanation as to how the submitted manuscript differs, and copies of closely related manuscripts reporting these data should be enclosed. If at any stage during the handling of their submission, authors decide to withdraw it, we ask them to notify the editor.

Length

Submissions should be double spaced and clearly legible. There is no maximum length for articles. We ask authors to be as concise as possible and will negotiate with you personally and sympathetically if we feel shortening would improve communication. Case reports are welcomed but should not be more than 6 pages. Letters should not be more than 2 pages.

Layout

Please submit four copies of each manuscript. They should be typed on one side of the paper, double spaced, with margins of at least 25 mm. The first sheet should contain the title of the paper, a short title not exceeding 45 characters, names of authors, the address where the work was carried out, and the full postal address of the author who will check proofs and receive correspondence and offprints. The second sheet should contain only the title, names of authors, and an abstract. Please send one extra loose copy of the abstract with submissions. The entire manuscript, including all references, tables, figures, and any other material, should be numbered in one sequence from the title page onwards. Please put at the bottom of the title page the *total* number of pages and, if possible, include a word count for the text and references (excluding title and abstract pages, tables and figures). Footnotes to the text should be avoided where possible.

Abstract

In the case of research reports, abstracts should use the following headings: Aims, Design, Setting, Participants, Intervention (experimental trials only), Measurements, Findings, and Conclusions. The findings should be clearly listed because it is the list of findings that will form the main basis for the editorial decision. Each finding will be evaluated in terms of its **importance if true** and the **confidence that can be placed on it** given the evidence. In the case of other types of paper, there are no formal requirements for the structure of abstracts but it must be clear from the abstract what conclusions are being drawn because evaluation of these will be central to the refereeing process. Abstracts should normally be no more than 250 words.

References

These may be submitted in either the Harvard or Vancouver systems. When following the *Harvard system* references should be indicated in the typescript by giving the author's name, with the year of publication in parentheses, e.g. Smith (1984); if there are three authors Smith, Green & Jones (1984) on the first citation and Smith *et al.* (1984) subsequently; or if there are more than three authors Smith *et al.* (1984) throughout. If several papers from the same authors and from the same year are cited, (a), (b), (c), etc. should be put after the year of publication. References should be listed at the end of the paper in alphabetical order. Examples are:

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BLANE, H. T. & LEONARD, K. E. (1987) *Psychological Theories of Drinking and Alcoholism* (New York, Guilford Press).

When following the *Vancouver system* references should be numbered consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals (in parentheses). References cited *only* in tables or in legends to figures should be numbered in accordance with a sequence established by the first mention in the text of the particular table or illustration.

The references should be listed in numerical order at the end of the paper. Examples are:

1. COTTON, N. (1987) The familial incidence of alcoholism, *Journal of Studies on Alcohol*, 40, 89–116.
2. MERIKANGAS, K. R. (1989) Genetics of alcoholism: a review of human studies, in: WETTERBERG, I. (Ed.) *Genetics of Neuropsychiatric Diseases*, pp. 21–28 (London, Macmillan).

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These should not be inserted in the text but each provided separately and numbered on the back with Figure numbers, title of paper and name of author. Illustrations should be prepared about twice their final size. Three copies of all figures must be submitted. All photographs, graphs and diagrams should be referred to as Figures and should be numbered consecutively in the text in Arabic numerals (e.g. Fig 3). The approximate position of each illustration should be indicated in the text. A list of captions for the figures should be submitted on a separate sheet and should make interpretation possible without reference to the text. Captions should include keys to symbols.

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Refereeing

Papers will normally be sent by the Regional Editor for review to an Assistant Editor who will solicit referees' reports and make a recommendation to the Regional Editor. The regional editor will make a decision on the paper and communicate this with the authors. The Regional Editor or the Assistant Editor may return a paper unrefereed if in their judgement it is not suitable for the journal because of serious methodological limitations, the topic addressed or problems with reporting.

Appendix 3:

Major Research Project Proposal

1. Doctorate in Clinical Psychology Guidelines
2. Hepatitis C Questionnaire
3. Hepatitis C Information Sheet
4. Hepatitis C Consent Form

RESEARCH PORTFOLIO GUIDELINES FOR MAJOR RESEARCH PROPOSAL

1.1 Applicants - names and addresses including the names of co-workers and supervisor(s) if known.

1.2 Title - no more than 15 words.

1.3 Summary - No more than 300 words, including a reference to where the study will be carried out.

1.4 Introduction - of less than 600 words summarising previous work in the field, drawing attention to gaps in present knowledge and stating how the project will add to knowledge and understanding.

1.5 Aims and hypothesis to be tested - these should wherever possible be stated as a list of questions to which answers will be sought.

1.6 Plan of investigation - consisting of a statement of the practical details of how it is proposed to obtain answers to the questions posed. The proposal should contain information on Research Methods and Design i.e.

1.6.1 Subjects - a brief statement of inclusion and exclusion criteria and anticipated number of participants.

1.6.2 Measures - a brief explanation of interviews/observations/ rating scales etc. to be employed including references where appropriate.

1.6.3 Design and Procedure - a brief explanation of the overall experimental design with reference to comparisons to be made, control populations, timing of measurements, etc. A summary chart may be helpful to explain the research process.

1.6.4 Settings and equipment - a statement on the location(s) to be used and resources or equipment which will be employed (if any).

1.6.5 Data analysis - a brief explanation of how data will be collated, stored and analysed.

1.7 Practical applications - the applicants should state the practical use to which the research findings could be put.

1.8 Timescales - the proposed starting date and duration of the project.

1.9 Ethical approval - stating whether this is necessary and, if so, whether it has been obtained.

HEPATITIS C QUESTIONNAIRE

SECTION 1: INTERVIEW INFORMATION

1. Initials: ☐☐

2. Date of Birth: ☐☐☐

3. Gender: Male ☐ Female ☐

4. Marital Status Married ☐ Single ☐ Other ☐

5. What is your current living arrangement House/Flat ☐ No Permanent Address ☐

6. At what age did you leave school? ☐☐

7. What qualifications if any did you get, (mark number of each qualification in box) None ☐ O'grades ☐ Highers ☐ Further Education ☐

8. Are you currently employed Yes ☐ No ☐

If yes, what is your current occupation _____

9. Are you currently having treatment because of your drug use? Yes ☐ No ☐

HEPATITIS C INFORMATION

1. Have you heard of hepatitis C ☐ Yes ☐ No

2. How likely do you think you are to develop hepatitis C?

Very Unlikely — Likely — Very Likely

2. Do you know anyone who is infected with hepatitis C ☐ Yes ☐ No

4. Have you ever had a Hepatitis C test ☐ Yes ☐ No

4 (a). Would you mind telling me the result ?

4 (b). If positive, how, if at all has this altered your drug use_____

5. How serious a risk do you consider hepatitis C in comparison to the other risks involved in your drug use

Not at all Serious — Somewhat Serious — Very Serious

The following are statements about Hepatitis C. Please decide whether you think they are true or false by ticking the appropriate box:-

	True	False
1. Hepatitis C can cause lung damage	☐	☐
2. Having a tattoo done with an unsterilized needle can give you Hepatitis C.	☐	☐
3. Treatment for hepatitis C is very effective?	☐	☐
4. You can catch hepatitis C through using a razor which belongs to someone who is infected.	☐	☐
5. Cleaning needles with bleach always protects against hepatitis C.	☐	☐
6. You can catch Hepatitis C by using spoons/filters after someone who is infected.	☐	☐
7. Hepatitis C is easily transmitted through unprotected sexual intercourse.	☐	☐
8.. It is possible to catch hepatitis C by using the same rinsing water (for drugs) as someone who is infected	☐	☐
9. You can catch hepatitis C through sharing your toothbrush with someone who is infected.	☐	☐
10. Injecting drug users often catch hepatitis C.	☐	☐
11. You should try not to drink alcohol if you have Hepatitis C.	☐	☐
12. You can get vaccinated against hepatitis C.	☐	☐
13. If someone who is pregnant catches Hepatitis C their unborn baby can catch it.	☐	☐
14. You need to clean needles in bleach for 30 seconds to kill hepatitis C.	☐	☐
15. Hepatitis C virus survives in dried blood for only a few minutes.	☐	☐
16. You can catch hepatitis C the first time you use unsterilized needles.	☐	☐

RECENT BEHAVIOUR

1. How old were you when you first started injecting drugs? ☐☐

2. How long have you been injecting drugs for? ☐☐

3. How often do you currently inject drugs

Not Often (i.e. less than once per month)	Somewhat Often (i.e. less than a month)	Often (about once a week)	Very Often (about once a day)	(i.e. more than

4. When you inject drugs how often is it with other drug users?

Not Often	Somewhat Often	Often	Very Often

5. When you injected in the last 6 months, how often was it with used needles and syringes?

Not Often	Somewhat Often	Often	Very Often	☐ Never

6. How many times did you borrow used needles and syringes in the last 6 months? ☐☐

7. In the last 6 months when you used needles or syringes someone else had used before you, how often did you clean them first?

Not Often	Somewhat Often	Often	Very Often

8. If cleaned somebody else's syringes, how did you normally clean them?

Adequate/Inadequate

9. How many times did you lend/pass on used needles and syringes in the last 6 months?

10. 10. In the last 6 months, how many times did you use borrowed spoons and filters?

11.How often did you clean them first?

Not Often	Somewhat Often	Often	Very Often

12. If cleaned equipment, how do you usually clean it?

Adequate/Inadequate

13. How often in the last 6 months did you pass on someone spoons and filters which you had already used?

Not Often	Somewhat Often	Often	Very Often	Never

14. How often in the last 6 months have you had unprotected sexual intercourse (including with your partner)?

Not Often	Somewhat Often	Often	Very Often

15. How often in the last 6 months has someone squirted drugs from their syringe into yours for your use?

Not Often	Somewhat Often	Often	Very Often

16. How often in the last six months have you injected drugs in a 'shooting gallery'? (a room/building where lots of drug users inject)

Not Often	Somewhat Often	Often	Very Often

17. How often in the last 6 months have you squirted drugs from your syringe into someone else's syringe for their use?

Not Often	Somewhat Often	Often	Very Often

The following questions relate to your feelings about future behaviours. Please mark where your opinion lies on each line with a cross.

1. I am confident that I can avoid borrowing used needles even if my friends are sharing

Completely Untrue	Mainly Untrue	Somewhat True	Mainly True	Completely True

2. I am confident that I will always clean used works (spoons/filters) with bleach before use

Completely Untrue	Mainly Untrue	Somewhat True	Mainly True	Completely True

3. I am sure that I will not use borrowed filters/spoons unless I clean them with bleach first

Completely Untrue	Mainly Untrue	Somewhat True	Mainly True	Completely True

4. I am certain that I will not borrow another drug users' toothbrush

Completely Untrue	Mainly Untrue	Somewhat True	Mainly True	Completely True

5. I am confident that I will not use borrowed needles unless I clean them with bleach

Completely Untrue	Mainly Untrue	Somewhat True	Mainly True	Completely True

6. I am certain that I can avoid lending/passing on used needles to other people in the near future

Completely Untrue	Mainly Untrue	Somewhat True	Mainly True	Completely True

7. I am sure that I will not squirt drugs from someone else's syringe into mine in the near future_____

Completely Untrue	Mainly Untrue	Somewhat True	Mainly True	Completely True

8. I am certain that I will not have sexual intercourse without using a condom (including with my partner).

_____

Completely Untrue	Mainly Untrue	Somewhat True	Mainly True	Completely True

The following questions are about attitudes which important people in your life may or may not hold. Please mark where you believe their attitudes to lie on the line with a cross.

1. Most people I know think that you should use condoms when having sexual intercourse (including with partner).

Completely True	Mainly True	Somewhat True	Mainly Untrue	Completely Untrue

2. My friends believe that you should always clean borrowed spoons with bleach before use

Completely True	Mainly True	Somewhat True	Mainly Untrue	Completely Untrue

3. I feel under social pressure to borrow used injecting equipment

Completely True	Mainly True	Somewhat True	Mainly Untrue	Completely Untrue

4. Drug users I know think that I should lend them (pass on) needles/syringes

Completely True	Mainly True	Somewhat True	Mainly Untrue	Completely Untrue

5. Most people I know do not use condoms during sexual intercourse (including with partner).

Completely True	Mainly True	Somewhat True	Mainly Untrue	Completely Untrue

6. Drug users I know always clean used needles with bleach before use

Completely True	Mainly True	Somewhat True	Mainly Untrue	Completely Untrue

7. Friends I know think it is alright to share your toothbrush

Completely True	Mainly True	Somewhat True	Mainly Untrue	Completely Untrue

8. Drug users I know disapprove of cleaning shared works with bleach

Completely True	Mainly True	Somewhat True	Mainly Untrue	Completely Untrue

9. My friends would disapprove if I re-used works without cleaning them first

Completely True	Mainly True	Somewhat True	Mainly Untrue	Completely Untrue

10. Drug users I know often squirt drugs from other peoples syringes into theirs for their use

Completely True	Mainly True	Somewhat True	Mainly Untrue	Completely Untrue

Information Sheet
For patients/volunteers in a clinical research study

Project Title:

Hepatitis C risk behaviours and drug user's sense of control, knowledge and peer group norms.

Patient/volunteer summary:

- You are being invited to take part in a research study. Your participation in this study may not be of direct benefit to you but could help in the development of treatment for the benefit of future patients.

- Taking part in the study involves completing one twenty-minute interview with the researcher. There are no other requirements of the research.

- The study hopes to look at some of the reasons why people undertake behaviours which may put them at risk for hepatitis C. We are interested in finding out about your understanding of hepatitis C, your attitudes and about the attitudes of the people you know. Part of the study will also ask you about possible past risk behaviours.

- Confidentiality of your responses shall be maintained and shall not be passed on to any treatment agency which you are involved with. All identifying information shall be kept separately from your interview responses in order that your views remain confidential.

- If you do not want to take part in this study or wish to withdraw at any time after commencing, you may do so without the need to give an explanation and your care will not be affected in any way.

PATIENT OR VOLUNTEER CONSENT TO PARTICIPATE IN RESEARCH STUDY

Project Title

Hepatitis C Risk Behaviours and drug user's perception of control, knowledge and peer group norms.

- You should have been given a complete explanation of the research study in which you are being invited to take part, including details of the procedures and treatment you would undergo as part of the study.
- You should have had the opportunity to ask questions.
- You should have received the information sheet on the study which has been approved by Lanarkshire Health Board Ethics of Research Committee, which you should have read and should keep.
- There is no obligation to take part in the study and you need not give any reason if you do not wish to take part in the study.
- You may withdraw from the study at any time without the need to give a reason and without any effect upon your normal care.

Consent

I ..... (name in capitals)

Of

.....
...

..... (address in capitals)

....agree to take part in this research project, the nature, purpose and possible consequences of which have been described to me....

by .....LISA CAMERON.....(name in capitals)

Subject signature

..... Dated .....

Researcher signature

.....

This form has been approved by Lanarkshire Health Board Ethics of Research Committee

Appendix 4:

Major Research Project Paper

1. Authors Notes – Addiction
2. Internal Consistency of HCV Questionnaire – Cronbachs Alpha
3. HCV Questionnaire Items
4. Percentage Table of Self-Efficacy Responses
5. Percentage Table of Peer-group Norm Responses

Addiction

Guidance to Authors

The editorial staff will be most grateful for your assistance in relation to the matters listed below. Please follow this guidance carefully when preparing a submission.

General matters

Addiction is a refereed journal. Its goal is to serve international and interdisciplinary scientific and clinical communication, to strengthen links between science and policy, and to stimulate and enhance the quality of debate. Submissions are sought which are not only technically competent, but are original and contain information or ideas of fresh interest to our international readership. Books and major reports may be submitted for review, and material for the News and Notes section is welcomed. We seek to serve the developing as well as the developed world. We aim to handle submissions courteously and promptly, and welcome dialogue with our contributors and readers. We regret that we are not able to return manuscripts.

Ethical standards

Manuscripts are accepted on the understanding that they are subject to editorial revision. Submissions must be accompanied by a signed statement from all authors saying that: (a) the material has not been published in whole or in part elsewhere; (b) the paper is not currently being considered for publication elsewhere; (c) all authors have been personally and actively involved in substantive work leading to the report, and will hold themselves jointly and individually responsible for its content; (d) all relevant ethical safeguards have been met in relation to patient or subject protection, or animal experimentation. This statement must also declare sources of funding, direct or indirect, and any connection with the tobacco, alcohol or pharmaceutical industries. With regard to points (a) and (b): if data from the same study are reported in more than one publication, this should be stated in the manuscript and/or covering letter to the editor, along with a clear explanation as to how the submitted manuscript differs, and copies of closely related manuscripts reporting these data should be enclosed. If at any stage during the handling of their submission, authors decide to withdraw it, we ask them to notify the editor.

Length

Submissions should be double spaced and clearly legible. There is no maximum length for articles. We ask authors to be as concise as possible and will negotiate with you personally and sympathetically if we feel shortening would improve communication. Case reports are welcomed but should not be more than 6 pages. Letters should not be more than 2 pages.

Layout

Please submit four copies of each manuscript. They should be typed on one side of the paper, double spaced, with margins of at least 25 mm. The first sheet should contain the title of the paper, a short title not exceeding 45 characters, names of authors, the address where the work was carried out, and the full postal address of the author who will check proofs and receive correspondence and offprints. The second sheet should contain only the title, names of authors, and an abstract. Please send one extra loose copy of the abstract with submissions. The entire manuscript, including all references, tables, figures, and any other material, should be numbered in one sequence from the title page onwards. Please put at the bottom of the title page the *total* number of pages and, if possible, include a word count for the text and references (excluding title and abstract pages, tables and figures). Footnotes to the text should be avoided where possible.

Abstract

In the case of research reports, abstracts should use the following headings: Aims, Design, Setting, Participants, Intervention (experimental trials only), Measurements, Findings, and Conclusions. The findings should be clearly listed because it is the list of findings that will form the main basis for the editorial decision. Each finding will be evaluated in terms of its **importance if true** and the **confidence that can be placed on it** given the evidence. In the case of other types of paper, there are no formal requirements for the structure of abstracts but it must be clear from the abstract what conclusions are being drawn because evaluation of these will be central to the refereeing process. Abstracts should normally be no more than 250 words.

References

These may be submitted in either the Harvard or Vancouver systems. When following the *Harvard system* references should be indicated in the typescript by giving the author's name, with the year of publication in parentheses, e.g. Smith (1984); if there are three authors Smith, Green & Jones (1984) on the first citation and Smith *et al.* (1984) subsequently; or if there are more than three authors Smith *et al.* (1984) throughout. If several papers from the same authors and from the same year are cited, (a), (b), (c), etc. should be put after the year of publication. References should be listed at the end of the paper in alphabetical order. Examples are:

ABRAMS, D. B. & WILSON, G. T. (1979) Effects of alcohol on social anxiety in women: cognitive versus physiological processes, *Journal of Abnormal Psychology*, 88, 161–173.

BLANE, H. T. & LEONARD, K. E. (1987) *Psychological Theories of Drinking and Alcoholism* (New York, Guilford Press).

When following the *Vancouver system* references should be numbered consecutively in the order in which they are first mentioned in the text. Identify references in text, tables, and legends by arabic numerals (in parentheses). References cited *only* in tables or in legends to figures should be numbered in accordance with a sequence established by the first mention in the text of the particular table or illustration.

The references should be listed in numerical order at the end of the paper. Examples are:

1. COTTON, N. (1987) The familial incidence of alcoholism, *Journal of Studies on Alcohol*, 40, 89–116.
2. MERIKANGAS, K. R. (1989) Genetics of alcoholism: a review of human studies, in: WETTERBERG, I. (Ed.) *Genetics of Neuropsychiatric Diseases*, pp. 21–28 (London, Macmillan).

Whatever referencing system is adopted, titles of journals should not be abbreviated. All authors should be included. The reference list should not be needlessly profligate and should only include items that are retrievable through standard bibliographic sources. Where foreign language papers or books are cited, the title in English needs to be included in brackets after the foreign language version.

Illustrations

These should not be inserted in the text but each provided separately and numbered on the back with Figure numbers, title of paper and name of author. Illustrations should be prepared about twice their final size. Three copies of all figures must be submitted. All photographs, graphs and diagrams should be referred to as Figures and should be numbered consecutively in the text in Arabic numerals (e.g. Fig 3). The approximate position of each illustration should be indicated in the text. A list of captions for the figures should be submitted on a separate sheet and should make interpretation possible without reference to the text. Captions should include keys to symbols.

Tables

These should be typed on separate sheets and their approximate position in the text should be indicated. Units should appear in parentheses in the column heading but not in the body of the table. Words or numerals should be repeated on successive lines 'ditto' or 'do' should not be used. Tables should not be ruled.

Proofs

Proofs are supplied for checking and making essential corrections, not for general revision or alteration. Proofs should be corrected and returned to the publisher within 3 days of receipt.

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Internal Consistency of the HCV Questionnaire

Scale	n	Alpha
1. Knowledge of HCV	16	0.68
2. Injecting Risk Behaviours	17	0.17 0.56 (if "frequency of sterilising equipment" is removed).
3. Sexual Risk Questions	4	0.81
4. "Peer Group Norms"	10	0.42 0.51 (if "sexual" and "household" norms are removed).
5. Self-efficacy	8	0.36 0.68 (if self-efficacy for sexual risks and lending needles are removed).

Note: Future research shall involve validation and standardisation of the HCV scale. To date, internal consistency has been analysed using Cronbach's coefficient alpha. Alpha measures of 0.6 & 0.7 are currently defined as good/adequate within the literature *[Clark, A. & Watson, D. (1995). Psychological Assessment, 7, 309-319.]*. Some aspects of the scale will therefore benefit from being adapted for future research.

Appendix 4

Alterations Made to the HCV Questionnaire following Pilot Study

In response to the pilot study the following alterations were made to the HCV questionnaire:-

1. A "never" category was included in relation to sharing needles/paraphernalia during the last 6 months. Prior to this the interviewer had had to write never and n/a next to the question.

2. Questions 8 & 9 of the peer norm scale & 2 of the self-efficacy scale were altered from citing 'works' to 'spoons/filters' in order that consistency of interpretation of these questions was ensured.

3. The scales used within the questionnaire were altered from visual-analogue using two anchor points to ordinal using four or five anchor points. During the pilot study there was confusion as to interpretation of the visual-analogue scale. An ordinal scale was therefore easier to comprehend and ensured some consistency between participant responses. The responses from participants from the pilot study were re-classified according to their position on the four/five point scale.

Not Often	Somewhat Often	Often	Very Often

Example 1: Amended scale

Not Often			Very Often

Example 2: Original scale

Percentage Distribution of Responses to Peer Group Norm Questions

Variable	Completely True	Mainly True	Somewhat True	Mainly Untrue	Completely Untrue
Peer Belief in Condom Use	31%	11%	19%	22%	17%
Peer Belief in Cleaning Paraphernalia With Bleach	24%	10%	16%	22%	28%
Peer Pressure to Borrow Injecting Equipment	16%	5%	4%	4%	70%
Peer Pressure to Lend Injecting Equipment	24%	20%	17%	12%	27%
Peers Not Using Condoms	42%	17%	27%	6%	7%
Peers Cleaning Used Syringes with Bleach	12%	6%	6%	27%	48%
Peer Household Risk - Sharing Toothbrush	10%	7%	24%	10%	49%
Peer disapproval of Sterilising with bleach	15%	7%	16%	22%	40%
Peer disapproval of not sterilising equipment	35%	14%	12%	10%	30%
Peer Frontloading	30%	12%	14%	7%	36%

Percentage Distribution of Responses to Self-efficacy Questions

Variable	Completely True	Mainly True	Somewhat True	Mainly Untrue	Completely Untrue
Avoiding Borrowing Needles	66%	17%	5%	7%	5%
Cleaning Injecting Equipment with Bleach	54%	17%	9%	3%	17%
Cleaning used Paraphernalia with Bleach	53%	5%	10%	9%	24%
Household risk – not Sharing toothbrush	91%	3%	1%	0%	5%
Cleaning used needles With bleach	70%	9%	3%	4%	15%
Not Lending used Needles	62%	9%	12%	6%	11%
Not Frontloading	82%	3%	6%	5%	5%
Sexual Intercourse using a Condom	43%	6%	17%	7%	26%