



European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) was set up in the face of an escalating drug problem in the European Union and a lack of sound and comparable information on the subject at European level. Established by Council Regulation (EEC) No 302/93 on 8 February 1993, the Centre became fully operational in 1995. Its main goal is to provide 'objective, reliable and comparable information at European level concerning drugs and drug addiction and their consequences'.

The Centre's tasks are divided into four categories:

- collecting and analysing existing data;
- improving data-comparison methods;
- disseminating data; and
- cooperating with European and international bodies and organisations, and with non-EU countries.

The EMCDDA works exclusively in the field of information.

Located in Lisbon, the EMCDDA is one of 12 decentralised agencies set up by the European Union to carry out specialised technical or scientific work. As such, the Centre is funded by the Community budget but is autonomous in its operations.

Price (excluding VAT) in Luxembourg: EUR 21



OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES

L-2985 Luxembourg

ISBN 92-9168-110-5



9 789291 681105

4

EMCDDA • INSIGHTS • SERIES

15 | 5 | 16 | TD-34-01-964-EN-C

INJECTING DRUG USE, RISK BEHAVIOUR AND QUALITATIVE RESEARCH IN THE TIME OF AIDS



E.M.C.D.D.A.

European Monitoring Centre
for Drugs and Drug Addiction

INSIGHTS

Injecting drug use, risk behaviour and qualitative research in the time of AIDS





Injecting drug use, risk behaviour and qualitative research in the time of AIDS

Authors

Tim Rhodes
Marina Barnard
Jane Fountain
Fabienne Hariga
Nuria Romo Avilés
Julian Vicente
Urban Weber

Editorial group

Tim Rhodes
Gloria Greenwood
Kathy Robertson

EMCDDA, July 2001

Information on the EMCDDA can be found on its web site (<http://www.emcdda.org>).

A great deal of additional information on the European Union is available on the Internet. It can be accessed through the Europa server (<http://europa.eu.int>).

Cataloguing data can be found at the end of this publication.

Luxembourg: Office for Official Publications of the European Communities, 2001

ISBN 92-9168-110-5

© European Monitoring Centre for Drugs and Drug Addiction, 2001
Reproduction is authorised provided the source is acknowledged.

Printed in Italy



Contents

FOREWORD 5

ACKNOWLEDGEMENTS 7

INTRODUCTION 9

INJECTING DRUG USE: ASSOCIATED HARMS 15

QUALITATIVE METHODS IN DRUGS RESEARCH 29

THE ROLE OF QUALITATIVE RESEARCH 41

UNDERSTANDING INJECTING RISK BEHAVIOUR 57

UNDERSTANDING SEXUAL RISK BEHAVIOUR 73

CONCLUSIONS 83

REFERENCES 93

CONTRIBUTORS 123



Foreword

Injecting is probably the main cause of health damage related to illegal drug use today. In Europe, drug injecting has been linked primarily to opiate use — particularly that of heroin — although, in some Nordic countries, it is also common among heavy amphetamine users.

Despite its very low prevalence in general population terms, drug injecting should nevertheless be considered, in some European countries, as a public health priority. It is strongly related to fatal and non-fatal drug overdoses, as well as to the transmission of infectious diseases, such as hepatitis B, hepatitis C and HIV infection.

Studying drug injecting is no easy task, largely due to its hidden nature and low prevalence. Classical epidemiological research has produced valuable, yet patchy, information on the practice and on the degree of associated risk. However, there are fundamental issues that need to be understood in order to interpret and better use epidemiological quantitative data on the subject.

From a conventional research perspective, and from the perspective of the ‘man in the street’, drug injecting is a risky practice and one which is difficult to comprehend. Despite the potential consequences of this behaviour, some individuals still begin and continue to inject illegal drugs, generally in very poor conditions.

It is necessary to understand why and how people decide to engage in such dangerous behaviour. It is therefore important to

analyse the perceptions and purposes of the injectors themselves, how they perceive risks and if, or how, they try to avoid them.

On a socio-historical level, drug injecting has been perceived as a static and long-standing phenomenon. Yet in fact it is a very dynamic and relatively new one. As a cultural innovation, drug injecting spread very quickly in western countries in the 1970s and 1980s and now seems to be spreading rapidly in other regions of the world, including central and eastern Europe. Meanwhile, several western countries have reported a recent trend away from injecting, which may imply that there is room for improvement and intervention, if only the underlying motivations of these changes can be understood.

Qualitative and anthropological research has proved to be a powerful tool in understanding drug use. The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) has been promoting the development of a network of qualitative researchers for several years and has commissioned a number of projects to create resources in this area. These include: a European bibliography; a research database; a specialised web site (<http://www.qed.org.uk>); and a scientific monograph (EMCDDA, 2000a).

Injecting drug use has been a priority topic in EMCDDA projects on qualitative research and a specific working group was set up to explore the issue in the late 1990s. The major findings of this group, released in 1999, provide the foundations of this publication.

We hope that the wealth of information contained in this edition of the EMCDDA *Insights* series will prove to be a valuable resource for all those carrying out research in this area.

Georges Estievenart

**Executive Director
EMCDDA**



Acknowledgements

This publication is the result of a review undertaken by the EMCDDA working group on injecting drug use and risk behaviour as part of a wider EMCDDA-funded project to gather and synthesise qualitative research on drug use and addiction in the European Union (Fountain and Griffiths, 1998; EMCDDA, 2000a). The review was compiled by:

- Tim Rhodes, Centre for Research on Drugs and Health Behaviour, Department of Social Science and Medicine, Imperial College School of Medicine, University of London;
- Marina Barnard, Centre for Drug Misuse Research, University of Glasgow;
- Jane Fountain, National Addiction Centre, Institute of Psychiatry, London;
- Fabienne Hariga, Modus Vivendi, Brussels;
- Nuria Romo Avilés, Escuela Andaluza de Salud Pública, Campus Universitario de Cartuja, Granada;
- Julian Vicente, European Monitoring Centre for Drugs and Drug Addiction, Lisbon; and
- Urban Weber, Médecins sans frontières, Moscow.

The project was coordinated by the National Addiction Centre (NAC) at the Institute of Psychiatry, London.

We would like to express our thanks to Jane Fountain (NAC) and to Richard Hartnoll and Julian Vicente (EMCDDA) for their help and input throughout the project, and to Deborah Olszewski and Lucas Wiessing (EMCDDA) for their comments on earlier drafts of

this publication. We are also grateful to the EMCDDA for granting the group permission to reproduce data on the prevalence of HIV, hepatitis B and C infections and on drug-related deaths from its recent annual reports (EMCDDA, 1999a; EMCDDA, 2000b).

Finally, we would like to thank Tim Rhodes for having assembled the findings of the group into a comprehensive publication. The chapter on 'The role of qualitative research' in the third section of this book is based on Rhodes' Chapter 1 of the EMCDDA scientific monograph *Understanding and responding to drug use: the role of qualitative research* (EMCDDA, 2000a).

EMCDDA working group on injecting drug use and risk behaviour



Introduction

Qualitative research in the field of illicit drug use and addiction has a long history (Feldman and Aldrich, 1990). This history is well documented in North America, with the contribution of qualitative methods in drugs research popularly associated with the emergence of the Chicago School (Dai, 1937; Singer, 1999).

The post-war period, in particular, produced North-American ethnographies of drug use which are now considered classics. These included works which have shaped contemporary social interactionist drug ethnography, including those by Lindesmith (1947), Becker (1953), and Finestone (1957), and, more recently, those by Hughes (1961), Sutter (1966), Preble and Casey (1969), and Agar (1973). This social-interactionist tradition arguably laid the foundations not only of drugs research, but also of qualitative methodology more generally (Becker, 1963; Lindesmith et al., 1975; Agar, 1980; Knipe, 1995).

Whereas there are historical accounts of North-American qualitative research on drug use (Feldman and Aldrich, 1990; Singer, 1999), the use of qualitative methods in European drugs research remains largely uncharted.

In Germany, Spain, France, the Netherlands and the United Kingdom (UK), there is arguably a longer tradition of qualitative research on drug use than in most European countries. Such cross-national differences appear to reflect broader country and cultural differences in research traditions and in the relative status of social science (especially sociology and anthropology) to psy-

chiatry, psychology, psychoanalytical approaches, pharmacology, medicine and epidemiology. Yet there is increasing interest in the use of qualitative methods as a means of understanding and responding to illicit drug use (EMCDDA, 2000a).

The advent of HIV infection, and AIDS in particular, brought about major shifts in the substantive interests of qualitative researchers, as well as methodological innovations more generally, including a wave of interest in multi-method research approaches and research on risk behaviour associated with injecting drug use (Lambert et al., 1995; Wiebel, 1996).

It is important to note that qualitative research often consists of multiple methods and data sources. The term 'qualitative research' refers to techniques which seek to generate, collate and analyse primarily 'qualitative' rather than 'quantitative' forms of data.

As shown in Figure 1, qualitative data can be summarised as information which is based on speech, text or observation and which is made available to analysis in textual rather than numerical form.

Key techniques of qualitative data collection may therefore include interviews, focus groups, observations, diaries, written biographies, oral histories, and other forms of written or visual documentation. Qualitative studies and, in particular, ethnographies, therefore tend to adopt multiple-method approaches to data collection and analysis. Denzin (1970) noted that such studies involve a 'blending of methodological techniques'. Ethnography has also been described as involving:

'...some amount of social interaction in the field with the subjects of the study, some direct observation of relevant events, some formal and a great deal of informal interviewing, some systematic counting, some collection of documents and artefacts; and open-endedness in the direction the study takes.' (McCall and Simmons, 1969, p. 1; quoted in Fielding, 1993, p. 157).

Taken together, the various methods of qualitative research are oriented towards understanding how people perceive their lives and construct them as meaningful (Agar, 1980; 1997; Carlson et al., 1995).

As shall be seen, qualitative research seeks to adopt an ‘inductive approach’ in an attempt to ‘make sense of, or interpret, phenomena in terms of the meanings people bring to them’ (Denzin and Lincoln, 1994). It is a ‘method of discovery’ (Fielding, 1993). Qualitative research works on the basis that the life or behaviour under study ‘becomes meaningful, reasonable and normal once you get close to it’ (Goffman, 1961, p. ix). There is probably no better way to understand people’s experiences, and the meanings they derive from them, than to speak with them, observe and spend time with them. In this way, it becomes possible to describe what they are doing, how they are doing it, and why.

In recognition of a growing interest in the use of qualitative methods in drugs research, and the varied qualitative research experience and expertise in Europe in particular, the EMCDDA commissioned a project to review and synthesise information published in the last 10 to 15 years on applied qualitative research on drug use and addiction in the European Union (EU) (Fountain and Griffiths, 1998).

The recently published EMCDDA scientific monograph *Understanding and responding to drug use: the role of qualitative research* (EMCDDA, 2000a) indicates that qualitative methods are

FIGURE 1: AIMS AND TECHNIQUES OF QUALITATIVE RESEARCH

Aim	to describe the social meanings actors attach to their actions to describe actors’ ‘lived experiences’ and lifestyles to describe the social environments in which action takes place
Data	textual
Data collection	observation, interviews, focus groups, diaries, written biographies, oral histories, photographs
Data analysis	inductive, hypothesis generating, systematic case comparison

of critical importance in describing and mapping patterns of drug use and in developing effective intervention and policy responses. Part IV of the monograph (Chapters 10 and 11) introduces the subject of risk behaviour in anticipation of this fourth edition of the EMCDDA *Insights* series. This present publication focuses in depth on the role of qualitative research in understanding injecting drug use and its adverse health consequences, particularly risk behaviour associated with HIV transmission.

Emerging out of a review paper produced by the EMCDDA working group on injecting drug use and risk behaviour, this volume does not aim to provide an exhaustive review of the literature. Neither does it aim to offer a methodological guide. Rather, it seeks to synthesise examples drawn from selected studies in an attempt to clarify the role of qualitative research in understanding health-related risk behaviours associated with injecting drug use. As the name of this EMCDDA series suggests, the object is to highlight the ‘insights’ to be gained by using qualitative methods in drugs research.

The first section of the book briefly summarises the health-related harms most commonly associated with drug injecting and provides a backdrop for the rest of the publication. As described in subsequent sections, qualitative understandings of risk behaviour are important, not only for identifying and describing how specific injecting practices relate to the risk of ill-health, but also for capturing the meanings that different individuals and groups attach to drug injecting and risk behaviours, and, crucially, for developing appropriate risk-reduction interventions.

While it is the case that quantitative survey methods and positivist paradigms remain dominant in the drugs and health research fields, there is increased recognition that qualitative methods have the capacity to inform survey designs and complement quantitative findings. Importantly, and in their own right, qualitative data provide the means for interpreting behaviours which might otherwise seem inexplicable. This is particularly the case among ‘hidden’ or ‘hard-to-reach’ populations — such as injecting drug users — where practical and methodological difficulties

exist in using large-scale survey methods based on statistically representative sampling designs.

Qualitative methods may be considered an essential component of multiple-method approaches to drugs research and particularly useful for providing the data necessary for developing risk-reduction interventions. Particular attention may be drawn to its role in:

- reaching and researching hidden populations;
- understanding the ‘lived experiences’ and meanings of drug use;
- understanding the social contexts of drug use;
- informing quantitative research;
- complementing and questioning quantitative research; and
- informing the development of effective intervention and policy responses.

In the following pages we hope to highlight the benefits afforded by the use of qualitative methods in drugs research, particularly research related to injecting drug use and risk behaviour.

Tim Rhodes, PhD

**Senior Lecturer in Sociology of Health
Centre for Research on Drugs and Health Behaviour
Department of Social Science and Medicine
Imperial College School of Medicine, University of London**

Injecting drug use: associated harms

INTRODUCTION	16
HIV INFECTION AND AIDS	16
HEPATITIS	21
OVERDOSE	23
SEXUAL HEALTH RISKS	26
OTHER INFECTIONS	27

INTRODUCTION

Injecting drug use is associated with a variety of functions, pleasures and harms. The bulk of research in this area has focused on harmful consequences associated with crime, income generation, health, social welfare, education and employment, and has revealed that such costs have individual, as well as wider community, implications.

Our focus here lies with the health-related harms and risk behaviours associated with drug injecting. Precisely what constitutes a health-related harm is subject to differences in experience, opinion and context. At the outset, it should be stated that there is no single definition or shared rationality for what constitutes a risk or harm (Rhodes, 1995). Not only is it likely that different understandings of risk behaviour or harm will exist between different injecting drug users (IDUs), but also that such differences are likely to depend on transitions in patterns of drug use as well as the social, economic and political contexts in which drug injecting occurs.

HIV INFECTION AND AIDS

While accepting that understandings of risk and harm are multiple, it is clear that drug injecting carries with it the potential for major public health problems. One of the most evident is HIV infection.

In a number of global regions, including some eastern and south-western European countries (Ball et al., 1998; Crofts et al., 1998; Rhodes et al., 1999a; 1999b), injecting drug use — or, more specifically, the shared use of injecting equipment — has constituted the predominant means of HIV transmission.

As of the end of 1998, at least one third of national reported AIDS cases were associated with drug injecting in Spain, Ireland, Italy

and Portugal, with at least one quarter associated with drug injecting in France and Austria (EMCDDA, 1999a). In parts of eastern Europe — including the newly independent States of Belarus, Moldova, Russia and the Ukraine — HIV associated with drug injecting accounts for at least 50 % of registered HIV cases, and as many as 90 % in some areas (Rhodes et al., 1999b).

Table 1, which is based on data provided by the Paris-based Centre européen pour la surveillance épidémiologique du SIDA (European centre for the epidemiological monitoring of AIDS), shows the incidence of drug-related AIDS cases in each EU Member State from 1985–99 (EMCDDA, 2000b).

Injecting drug use is currently reported by 129 countries and territories, of which 103 also report associated HIV (Ball et al., 1998). HIV transmission associated with drug injecting can spread extremely rapidly, with HIV prevalence among IDUs rising from virtually zero to 40 % within one to two years in some cases (Ball et al., 1998; Strathdee et al., 1998; Rhodes et al., 1999a).

As shown in Table 2, the recent spread of HIV associated with drug injecting has been explosive in parts of eastern Europe, as indicated by the exponential rise in the number of registered HIV-positive IDUs since 1994 (known to be an underestimate).

Once HIV prevalence is high, it may take some time before it stabilises or declines (Davies et al., 1995; Des Jarlais et al., 1998), but even a decline may mask ongoing transmission among young IDUs and recent initiates to drug injecting. HIV associated with drug injecting continues to present major public health costs — human, financial and social — in European countries, such as Spain, France, Italy and the Netherlands, and parts of eastern Europe (Dehne et al., 1999; EMCDDA, 1999a; Rhodes et al., 1999b). Figure 2 summarises HIV prevalence data among IDUs in the EU (EMCDDA, 1999a).

Understanding the dynamics of HIV-related risk behaviour provides a key means to mapping and preventing HIV epidemics. HIV transmission is known to be associated with the sharing of

TABLE 1: INCIDENCE OF DRUG-RELATED AIDS CASES (1985–99)
ANNUAL INCIDENCE RATES PER MILLION POPULATION

Country	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999*
Belgium	0.0	0.1	0.5	0.7	1.0	1.1	2.2	2.3	2.1	2.0	1.5	1.0	0.6	1.2	0.0
Denmark	0.0	0.2	0.6	1.2	1.6	3.1	3.1	3.5	4.1	4.6	5.4	3.2	1.7	0.6	1.4
Germany	0.2	0.6	1.6	2.2	2.9	2.9	2.9	3.4	3.4	3.7	3.2	2.6	1.5	0.9	1.3
Greece	0.0	0.1	0.1	0.2	0.5	0.6	1.2	0.6	0.8	0.5	0.4	0.9	1.1	0.3	0.8
Spain	2.4	7.1	17.1	38.8	52.1	64.7	73.4	79.2	86.0	120.5	113.0	103.2	73.2	52.4	45.0
France	0.8	2.7	6.0	11.1	15.7	18.5	20.8	22.8	25.2	23.1	22.0	15.9	7.0	5.4	n.a.
Ireland	0.6	0.3	2.8	3.1	6.8	8.3	9.4	10.3	10.8	7.1	5.8	6.9	2.5	1.6	3.2
Italy	1.7	4.8	12.0	21.3	29.0	36.1	43.3	48.3	52.7	58.7	58.1	50.0	30.8	19.5	15.5
Luxembourg	0.0	2.7	0.0	2.7	8.0	0.0	2.6	7.7	12.7	5.0	0.0	4.9	4.8	7.4	4.7
Netherlands	0.1	0.4	1.1	2.3	2.3	2.7	2.9	3.7	3.9	4.0	5.0	3.1	2.7	1.7	0.6
Austria	0.8	0.4	3.6	4.3	5.7	5.8	7.0	7.2	7.4	5.2	4.0	3.0	2.5	2.9	2.4
Portugal	0.1	0.3	0.7	1.0	3.0	4.3	7.3	13.5	23.7	33.1	39.5	47.0	51.0	54.7	60.4
Finland	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.6	0.2	0.2	0.2	0.4	0.4	0.0	0.0
Sweden	0.0	0.0	0.1	0.6	0.5	1.3	2.3	2.5	3.8	3.0	2.7	2.5	1.0	0.9	0.9
United Kingdom	0.0	0.1	0.3	0.5	1.1	1.4	1.5	1.4	2.6	2.3	2.5	2.0	1.3	0.8	0.9

NB: Figures are adjusted for reporting delays.

In some countries, there may be small differences between the figures reported by the Centre européen pour la surveillance épidémiologique du SIDA and national figures due to reporting delays.

* Up to 30 June 1999.

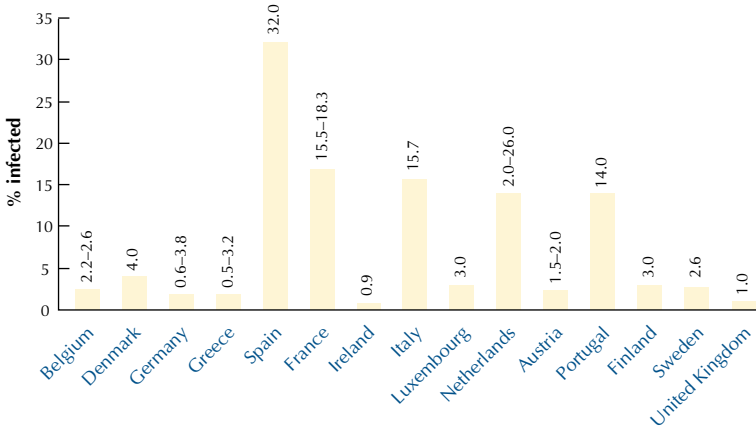
Source: Centre européen pour la surveillance épidémiologique du SIDA (European centre for the epidemiological monitoring of AIDS), Paris.
Complementary statistical tables to the 2000 Annual report on the state of the drugs problem in the European Union (EMCDDA, 2000b).

TABLE 2: NEW HIV INFECTIONS AMONG IDUs IN BELARUS, KAZAKHSTAN, MOLDOVA, RUSSIA AND THE UKRAINE (1993–98)

Country	1993		1994		1995		1996		1997		1998	
	Total	(IDU)	Total	(IDU)	Total	(IDU)	Total	(IDU)	Total	(IDU)	Total	(IDU)
Belarus	10	(2)	5	(1)	8	(0)	1 021	(934)	653	(568)	554	(434)
Kazakhstan	6	(0)	2	(0)	5	(2)	48	(38)	437	(389)	299	(261)
Moldova	3	(0)	3	(0)	7	(1)	55	(38)	404	(358)	408	(341)
Russian	108	(0)	158	(2)	196	(5)	1 535	(1 018)	4 337	(2 220)	3 913	(1 637)
Ukraine	51	(0)	44	(0)	1 499	(1 049)	12 228	(5 729)	15 443	(7 950)	12 896	(5 574)

Source: Statistics from Official Ministries of Health (Rhodes et al., 1999a; 1999b).

FIGURE 2: HIV PREVALENCE AMONG IDUs IN THE EU



Source: EMCDDA, 1999a.

used injecting equipment, but ‘sharing’ practices vary widely depending on an interplay of social, contextual, economic and political factors.

Syringe sharing, for example, is not merely a product of individuals’ risk calculus (Latkin et al., 1994), but is also contextually determined by: peer groups and cultural ‘norms’ (Zule, 1992; Friedman et al., 1997); paraphernalia laws, drug policing and law enforcement (Grund et al., 1992a; Koester, 1994; Lurie and Drucker, 1997); injecting equipment availability (Hurley, Jolley and Kaldor, 1997); gender, ethnic and health inequalities (Barnard, 1993a; Friedman et al., 1998); the political and social economy (Grund et al., 1992a; Singer, 1998); and, perhaps most importantly, public health policy (Drucker et al., 1998; Strathdee et al., 1998).

Qualitative understandings of the social context of risk behaviour are paramount in understanding HIV infection, and HIV-related risk behaviour, as products of the particular ‘risk environments’ in which they occur.

HEPATITIS

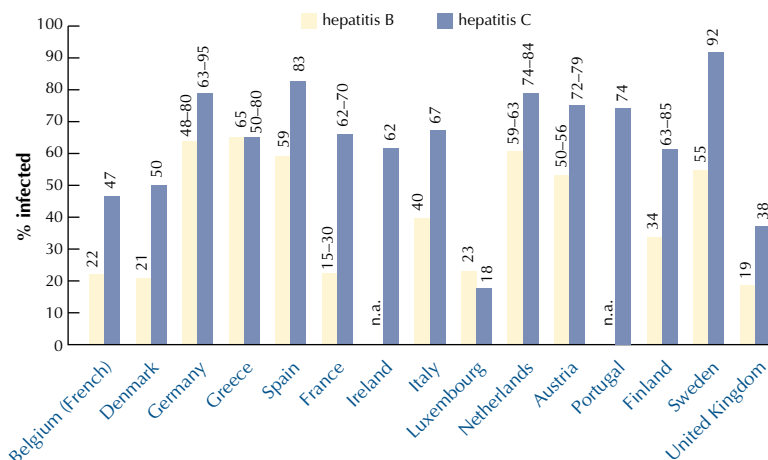
In many European countries, public health concerns associated with the transmission of hepatitis have been eclipsed by concerns about HIV. However, while the prevalence of hepatitis B virus (HBV) infection among IDUs has fallen in many European countries over the past decade (EMCDDA, 1999a), data from Spain, the Netherlands, Austria and Sweden indicate that over half of IDUs are HBV antibody positive (Wiessing et al., 1998a; 1998b).

Approximately 40 % of IDUs have been found to be HBV positive in studies in Germany and Italy (EMCDDA, 1999a). Whereas community-recruited surveys found over 50 % of London IDUs to be HBV positive in the early to mid-1990s (Rhodes et al., 1996), the latest estimates, also drawn from community-recruited surveys, indicate HBV prevalence of under 20 % (Hickman et al., 1999; Judd et al., 1999a).

Since the introduction of measures to prevent hepatitis C virus (HCV) transmission through blood products, injecting drug use has accounted for the majority of new HCV infections, with prevalence among IDUs ranging between 50 and 90 %, and incidence rates between 10 and 20 % per year (Judd et al., 1999b).

Most recent estimates in Europe suggest that over 50 % of IDUs are HCV positive (van Ameijden et al., 1993; Galeazzi et al., 1995; Serfaty et al., 1997; Broers et al., 1998; Lamden et al., 1998), with estimates of over 80 % in parts of Greece, Spain, Ireland, the Netherlands, Portugal and Sweden (Wiessing et al., 1998a; 1998b; EMCDDA, 1999a). It is estimated that approximately 500 000 IDUs are HCV positive in the EU (Nalpas et al., 1996). Most studies show HCV prevalence rising steadily with length of injecting career and increasing age (Crofts et al., 1997; Broers et al., 1998; van Beek et al., 1998), though frequency of injecting, injection equipment sharing, and co-infection with HIV or HBV have also been identified as risk factors (van Beek et al., 1994; Galeazzi et al., 1995; Lamden et al., 1998). Figure 3 summarises reported HBV and HCV antibody prevalence among IDUs in the EU (EMCDDA, 1999a).

FIGURE 3: ANTIBODIES TO HEPATITIS B AND C AMONG IDUs IN THE EU



Source: EMCDDA, 1999a.

In general, there is little evidence of declines in HCV prevalence among IDUs. One exception appears to be the UK. Among IDUs seeking named HIV antibody tests, HCV prevalence fell from 90 % in 1990 to 77 % in 1995 (Goldberg et al., 1998). A recent prevalence study among 740 community-recruited IDUs in England found lower than expected HCV prevalence (under 40 %), with 15 % HCV positivity among those with injecting careers of under six years and 10 % among those with injecting careers of under two years (Hickman et al., 1999).

These studies hypothesise that HCV positivity remains low among those who began injecting after harm-reduction interventions had been established, and this suggests that harm reduction may have had positive HCV prevention impact (Goldberg et al., 1998; Hickman et al., 1999). It is important to note, however, that it is only comparatively recently that epidemiological studies have begun to estimate the determinants and distribution of HCV among IDUs, and there remains a need for qualitative studies to inform the development of more sensitive measures of HCV-related risk behaviour. There are few published ethnographic

studies on the 'lived experience' of HCV risk behaviour, positive diagnosis and associated risk management.

OVERDOSE

In western Europe, opioid users have a risk of premature death that is 20–30 times higher than their peers who do not use drugs (Joe and Simpson, 1987; Davoli et al., 1993; 1997; Frischer et al., 1997; EMCDDA, 1999a; Hulse et al., 1999).

In Rome, for example, male IDUs have a risk of death that is 15 times higher, and female IDUs 30 times higher, than would be expected in the general population (Davoli et al., 1997). One 22-year follow-up study among UK opioid users found an annual mortality rate of 1.8 %, 12 times greater than the general population (Oppenheimer et al., 1994). In Glasgow, Scotland, IDUs were found to be 22 times more likely to die than their peers (Frischer et al., 1997), with follow-up studies showing a 1.8 % mortality rate.

Since the mid-1980s, sharp increases in mortality rates among IDUs have been associated with the emergence of HIV/AIDS in some countries, including Spain, France and Italy (Davoli et al., 1993; 1997; Orti et al., 1996; Mezzelani et al., 1998). However, European studies also show high mortality rates among HIV-negative IDUs (EMCDDA, 1999b).

In the UK, 60 % of addicts' deaths are related to drug use, mainly from overdose (Ghodse et al., 1998), and drug-related deaths have been on the increase since 1984. In Glasgow, where almost one third of all deaths among people aged between 15 and 33 years are drug-related, 90 % of addict deaths are related to overdose or suicide, with 2 % caused by HIV-related disease (Frischer et al., 1997).

While there is considerable European variability in definitions and methods of recording drug deaths (including 'overdose'), as

well as in recent mortality trends, (overdose — which is preventable — remains a major cost related to drug use and addiction (WHO, 1999). Table 3 shows that, until recently, drug-related deaths were on the increase in most EU Member States and still are in some cases (EMCDDA, 2000b).

Research also shows non-fatal overdose to be common. An Australian sample of 329 IDUs yielded a 68 % prevalence of non-fatal heroin overdose (Darke et al., 1996a; 1996b). Approximately one third had overdosed in the previous 12 months. A study among 1 018 IDUs in Glasgow found that 27 % had reported at least one non-fatal overdose which required medical attention in the previous 12 months (Taylor et al., 1996). A national survey among 2 051 drug users in Norway, two thirds of which had reported opioid use in the previous six months, found 45 % to have experienced one or more life-threatening overdoses. Unpublished data from Brussels show that 33 % of IDUs reported having had at least one overdose, with a mean of 3.5 overdoses reported (Hariga, 1999). The prevalence of non-fatal overdose indicates the high risk of overdose-related morbidity.

Epidemiological research has identified a number of risk factors for non-fatal opioid overdose (Darke et al., 1996a; Taylor et al., 1996; Davoli et al., 1997; Seaman et al., 1998). These include:

- injection, rather than smoking or snorting, of heroin;
- variations in drug purity and supply;
- miscalculations made by drug users when testing the strength of drugs prior to use;
- concurrent use of other substances in addition to opioids (particularly alcohol, benzodiazepines and barbiturates); and
- recent release from prison.

Studies also identify overdose itself as a risk factor, with the chance of a further overdose increasing for each overdose reported (Powis et al., forthcoming). With the majority of non-fatal overdoses occurring in the company of others (Darke et al., 1996b; Powis et al., forthcoming), and as overdose is preventable, qualitative studies have a key role to play in understanding

TABLE 3: NUMBER OF ACUTE DRUG-RELATED DEATHS RECORDED IN THE EU (1985–98)

Country	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Belgium	12	20	17	37	49	96	90	75	80	46	48	n.a.	n.a.	n.a.
Denmark	150	109	140	135	123	115	188	208	210	271	274	266	275	250
Germany	324	348	442	670	991	1 491	2 125	2 099	1 738	1 624	1 565	1 712	1 501	1 674
Greece	10	28	56	62	72	66	79	79	78	146	176	222	232	244
Spain	143	163	234	337	455	455	579	556	442	388	394	429	360	310
France	172	185	228	236	318	350	411	499	454	564	465	393	228	143
Ireland	19	6	4	7	5	7	7	14	16	19	39	50	52	90
Italy	242	292	543	809	974	1 161	1 383	1 217	888	867	1 195	1 566	1 160	1 076
Luxembourg	1	3	5	4	8	9	16	17	14	29	20	16	9	16
Netherlands	40	42	23	33	30	43	49	43	38	50	33	63	70	61
Austria	–	–	–	–	–	36	70	121	130	140	160	179	132	108
Portugal	n.a.	18	22	33	52	82	121	156	115	143	198	232	235	337
Finland	n.a.	n.a.	n.a.	11	23	41	34	27	26	35	51	45	n.a.	n.a.
Sweden	150	138	141	125	113	143	147	175	181	205	194	250	n.a.	n.a.
United Kingdom (England and Wales)	1 254	1 362	1 332	1 348	1 321	1 339	1 411	1 533	1 615	1 796	1 956	2 150	2 144	n.a.

n.a. = data not available.

Source: Complementary statistical tables to the 2000 Annual report on the state of the drugs problem in the European Union (EMCDDA, 2000b).

the dynamics of overdose situations and in informing the development of prevention and risk management interventions.

An understanding of IDUs' perceptions of risk associated with overdose, their attitudes and responses to overdose and their overdose prevention, risk management and coping strategies is pivotal to developing effective responses to prevent overdose and overdose fatalities.

SEXUAL HEALTH RISKS

While it is recognised that drug use intersects with sexual behaviour in multiple ways, the sexual health of drug-using populations has often been neglected by researchers and interventionists.

In public health terms, sexual risk among IDUs is largely equated with condom use and the need to prevent sexually transmitted infections (STIs) associated with unprotected sex.

Studies indicate that the sexual transmission of HIV among IDUs remains a significant concern, particularly in areas in which HIV or other STI epidemics are established, and where drug use intersects with sex work (van den Hoek et al., 1992; Battjes et al., 1994; Rhodes et al., 1998; 1999b).

Qualitative studies of sexual negotiation and risk behaviour among IDUs and their sexual partners are clearly important for developing sexual risk-reduction interventions. Better understanding of the role of social context in mediating drug use and its perceived effects on sexual behaviour, and of the perceived impact of drug use on the quality of sexual relationships, is helpful in recognising the variety of ways in which drug injecting intersects with sexual health.

OTHER INFECTIONS

In addition to HIV and hepatitis, drug injecting may also be associated with the transmission of other blood-borne, bacterial, fungal and parasitic infections (Donoghoe and Wodak, 1998). The majority of hospital admissions of IDUs, as well as admissions to emergency care, may be associated with endocarditis, abscesses, thrombophlebitis and other local complications associated with injecting (Scheidegger and Zimmerli, 1989; Makower et al., 1992).

Mortality from infective endocarditis among IDUs has been estimated to range between 15 % and 92 %, and is a common cause of death among HIV-positive IDUs (English et al., 1995).

Qualitative methods in drugs research

INTRODUCTION	30
THE TIME BEFORE AIDS	30
THE TIME OF AIDS	34
THE TIME OF WRITING	38

INTRODUCTION

HIV infection and AIDS have had a major impact on the substantive interests as well as methodological parameters of drug use research, and have arguably been a catalyst to greater methodological flexibility, experimentation and innovation (Boulton, 1994; Lambert et al., 1995; Singer, 1999). In fact, the time of AIDS may come to symbolise a key historical moment in the contemporary development of qualitative methods in drugs research (Herdt and Lindenbaum, 1992; Singer, 1999; Rhodes, 2000a; forthcoming).

This chapter aims to summarise key historical developments in the use of qualitative methods in North-American drugs research up until the time of AIDS (here loosely defined as the mid-1980s). Developments in North-American drugs ethnography arguably laid the foundations for contemporary qualitative research on drug use. Also outlined is the growth of European interest in conducting qualitative research on drug use and HIV-related risk behaviour in the last 10 to 15 years.

THE TIME BEFORE AIDS

It is said that the beginnings of modern qualitative research on drug use can be traced to De Quincey's *Confessions of an English opium eater* (1822), where the method employed was akin to participant observation (Feldman and Aldrich, 1990). Over a number of years, De Quincey described the use of opium (which, prior to the invention of the hypodermic needle in 1865, was imbibed in liquid form) among the urban poor in London, as well as his own experiments with the drug.

Singer (1999) suggests that another notable 'ethnographic' account of drug use which emerged during the same period was that of Engels, who, in *The conditions of the working class* in 1844, noted how the use of opium (primarily laudanum) and

alcohol among the urban poor of Manchester in the UK functioned as a means of escape (Engels, 1969).

The methodological origins of applied qualitative research may be traced to social interactionism in sociology, which emerged in the 1920s and 1930s, led by the Chicago School (Znaniecki, 1934; Carey, 1975). These developments emphasised the socially situated nature of individual action, and demonstrated the value of integrating multiple methods to understand the subjective meanings and social contexts of behaviour, giving rise to a number of ethnographies in drug use, criminality and deviance (Anderson, 1923; Shaw, 1930; Dai, 1937; Whyte, 1955).

This is the genesis of qualitative research as a means of understanding drug use as socially constructed, and of encouraging intervention developments coherent with local practices in different cultural settings. Chicago School ethnography thus sought to describe in detail a particular 'community, group or situation' (Hammersley, 1992), and the first such drug ethnography is often attributed to Dai and his *Opium addiction in Chicago*, where he attempted to understand drug users 'as a group' in the context of 'the world they live in' (1937, p. 645).

Building on the principles of social interactionism, post-war qualitative studies on drug use have been of note not only for the social explanations of drug use and addiction they provided, but also for their insights into qualitative methodology, and theorising on social deviance more generally (Lindesmith, 1947; Becker, 1953; 1963; Agar, 1973; Lindesmith et al., 1975; Weppner, 1977).

The clandestine nature of many drug-use behaviours and 'sub-cultures' has provided ideal terrain for the development of what are now considered classic ethnographies of drug use and hidden populations (Becker, 1953; Sutter, 1966; Preble and Casey, 1969; Agar, 1973; Jackson, 1978). In the tradition of ethnography, the focus of such research was to 'make sense' of the social world of drug use from the perspectives of drug users. Drawing on a variety of techniques, including direct observations and face-to-face interviews,

these studies sought to describe the everyday context of behaviours and lifestyles otherwise misunderstood or hidden from view.

Drug ethnographies between the late 1950s and 1970s countered popular perceptions of drug users as passive or deviant with alternative images of drug use and drug users' lifestyles as purposeful and active (Finestone, 1957; Hughes, 1961; Becker, 1963; Preble and Casey, 1969; Agar, 1973; Feldman et al., 1979). Additionally, they understood drug use and addiction as being inextricably bound with the situational and lifestyle contexts in which drug use occurred, including in relation to urban city life, political and economic economy, migration and recreational or leisure activity (Finestone, 1957; Lindesmith et al., 1975; Singer, 1999).

As was noted at the time: 'addicts become addicted not only to drugs but to a way of life' (Lindesmith et al., 1975, p. 571). As ethnographies of LSD (Becker, 1970), PCP (Feldman et al., 1979), urban heroin use (Finestone, 1957; Hughes, 1961; Sutter, 1966; Preble and Casey, 1969; Agar, 1973), methadone (Preble and Miller, 1977), drugs in prison, and alcohol (Spradley, 1970) demonstrated, popularly misunderstood behaviours were discovered to be rational and normal when understood from the perspectives of drug users and when 'situated' within the social contexts in which they occurred.

Key North-American qualitative studies in this area are arguably those of Finestone (1957), Sutter (1966), Preble and Casey (1969) and Agar (1973). Based on 50 qualitative interviews with African-American heroin users, Finestone's (1957) was one of the first studies to establish a grounded world-view of heroin use as normal and rational (Singer, 1999). Centring on 'the cat' (an apt image depicting the African-American heroin user), 'the hustle' (illegal activities to generate revenue) and 'the kick' (the use of drugs), Finestone's study marked a shift from 'asking why people used drugs' towards exploring 'how they went about getting involved in drug use' (Feldman and Aldrich, 1990, p. 19).

Sutter's study — 'The world of the righteous dope fiend' (1966) — noted the processes, positive qualities and functions of maintain-

ing status in drug-user hierarchies, findings which were later paralleled by the ethnographic work of Feldman (1973). Similarly, Preble and Casey’s seminal paper, ‘Taking care of business’, described heroin use as ‘anything but an escape from life’, in which drug users were ‘actively engaged in meaningful activities and relationships seven days a week’ wherein the ‘quest for heroin is the quest for a meaningful life’ (1969, p. 2).

Likewise, Agar’s *Ripping and running* (1973), as well as Waldorf’s *Careers in dope* (1973), ran counter to the ‘received view’ of IDUs’ lifestyles by illustrating how this particular way of life was active and purposeful and made sense from the perspectives of IDUs themselves. Qualitative research between the 1950s and 1970s had, to some extent, facilitated a shift away from depictions of addiction derived from medicine, psychology and psychiatry to those grounded in drug users’ own experiences and perspectives (Feldman and Aldrich, 1990; Singer, 1999). Figure 4 offers an overview of the developments in qualitative research on drug use since the early 1800s.

FIGURE 4: DEVELOPMENTS IN QUALITATIVE RESEARCH ON DRUG USE

1800s	Informal observations and participant observations Examples: De Quincey (1822), Engels (1844)
1920s–1940s	Social-interactionist studies of the Chicago School Examples: Shaw (1930), Dai (1937), Lindesmith (1947)
1950s–1960s	Social-interactionist studies in drug ethnography Examples: Becker (1953), Finestone (1957), Sutter (1966)
1970s–1980s	Social-interactionist studies of urban/drug ‘lifestyle’ and ‘career’ Examples: Agar (1973), Feldman (1973), Waldorf (1973)
1980s–1990s	Multi-method studies of drug use, risk (AIDS) and context Examples: Pearson (1987), Grund (1993), Gamella (1994)

In the time before AIDS, most qualitative research on drug use, including injecting drug use, was therefore characterised by attempts to provide rich descriptions of hidden populations of drug users and their ‘socially deviant’ lifestyles. The substantive

interests were less likely to be driven by public health concerns about the potential risks associated with injecting than by explorations of *why* people used drugs — a key focus of drugs research in the pre-war period — and *how* people used drugs — a key focus of drugs research in the post-war period, as well as the time immediately before AIDS (Singer, 1999).

The key thrust of qualitative research in the time immediately before AIDS was, therefore, the exploration of drug use as an inextricable feature of social circumstances and ‘sub-cultures’ which made little rational or moral sense to ‘outsiders’. As noted by Singer (1999), North-American drug ethnographies of the late 1970s and mid-1980s largely proffered accounts from a ‘drug-user perspective’ and invited a holistic image of the drug ‘sub-culture’, ‘career’, and ‘lifestyle’ (Feldman et al., 1979; Rosenbaum, 1981; Hanson et al., 1985; Johnson et al., 1985). As has been noted of the role of ethnography more generally, the aim is to undertake a ‘study of culture from within’ (James, 1977, p. 180).

THE TIME OF AIDS

The arrival of HIV infection and AIDS brought about considerable changes in the use of qualitative methods in drugs research. This shift can be traced to the mid-1980s with the discovery that HIV infection was spreading ‘epidemically’ among populations of IDUs through the shared use of injecting equipment and through unprotected sex.

In Europe, this was found to be particularly the case in (western) Germany (Heckmann et al., 1993; Pant and Kleiber, 1993), Spain (Anchuela et al., 1994; de la Fuente et al., 1994), France (Ingold and Toussirt, 1997), Italy (Rezza et al., 1994; Davoli et al., 1995) and Edinburgh in the UK (Robertson et al., 1986).

At the time that HIV was becoming evident among IDUs, a number of European ethnographies were investigating the social and eco-

conomic context of new waves of heroin use and injection, said to have peaked in the early to mid-1980s. Principal among these were:

- Pearson's *The new heroin users* (1987) in Manchester in the north-west of England;
- Taylor's *Women drug users* (1993) in Glasgow (the first ethnography of a female injecting community);
- Gamella's life history studies of the diffusion of heroin and drug injecting in Spain (1993; 1994; 1997a; 1997b);
- Pallares' ethnography *El placer del escorpión* (1996) of heroin use between 1970 and 1990 in Barcelona;
- Noller and Reinicke's *Heroinszene* (1987) and Noller's follow-up *Junkie-maschinen* (1989) in Frankfurt;
- van Gelder and Sijtsma's *Horse, coke en kansen* (1988) in Amsterdam; and
- Grund's *Drug use as a social ritual* (1993) in Rotterdam.

These, and other European ethnographic studies since the mid-1980s (Hakkarainen, 1989; Romaní, 1992; Ruggiero, 1992; Zurhold, 1993; Fernandes, 1995; Svensson, 1996), drew on the concepts of drug 'career' and 'lifestyle' emerging from North-American ethnographies. They aimed to describe how social and economic shifts associated with unemployment and housing influenced patterns of drug use and injecting, and provided a descriptive backdrop for understanding the wider 'risk environment' associated with drug use.

Coinciding with increased concerns associated with HIV transmission, these studies also attempted, to a varying extent, to capture descriptive data on risk behaviour. Gamella's study among the 'yonquis' (junkies) of a neighbourhood in northern Madrid, for example, observed high levels of needle and syringe sharing in the early to mid-1980s resulting in unexpectedly high levels of HIV prevalence (of over 50 %) within IDU networks (Gamella, 1991; 1993; 1994; 1997c). Similarly, Grund's studies on the rituals of social regulation associated with patterns of heroin smoking and injecting led him to observe, describe and define a range of injecting behaviours associated with HIV transmission (Grund et al., 1990; 1991; 1993; 1996).

From the mid-1980s onwards, the health risks associated with drug injecting became a key feature of drugs research — particularly in Spain, France, Italy, the Netherlands and the UK — with HIV constituting a major public health issue demanding policy-relevant research. This concern prompted a flurry of activity characterised by an unusual alliance between epidemiology and ethnography as researchers within each of these disciplines grappled to understand the dynamics of the spread of HIV (Boulton, 1994; Wiebel, 1996).

At the time, an important epidemiological objective was to ascertain the prevalence and incidence of HIV and AIDS among IDUs, both to assess the current situation and to model its future spread. This led to a number of primarily quantitative studies of HIV prevalence and related risk behaviour in the EU, including the following:

- Belgium (Peeters, 1990; Todts et al., 1990; 1997);
- Denmark (Ege, 1989; Hedburg and Gaub, 1995; Sorensen et al., 1995);
- Germany (Hamouda et al., 1993; Heckmann et al., 1993; Pant and Kleiber, 1993);
- Greece (Papaevangelou et al., 1991; Kokkevi et al., 1992);
- Spain (Zunzunegui-Pastor, 1993; Anchuela et al., 1994; de la Fuente et al., 1994);
- France (Ingold and Toussirt, 1997; Rotilly, 1997);
- Ireland (Johnson et al., 1994; O’Gorman, 1998);
- Italy (Nicolosi et al., 1992; Rezza et al., 1994; Davoli et al., 1995);
- the Netherlands (van Ameijden et al., 1993);
- Portugal (Costa, 1994; 1997; Godinho et al., 1996);
- Finland (Leinikki et al., 1996; Poikolainen, 1997; Vuori et al., 1997);
- Sweden (Ljungberg et al., 1991; Krook et al., 1997); and
- the United Kingdom — in London (Rhodes et al., 1993; 1996; Stimson et al., 1996), in Glasgow (Frischer et al., 1992; Taylor et al., 1994) and in Edinburgh (Robertson et al., 1986; Davies et al., 1995).

To a large extent, these epidemiological studies provided the backdrop for qualitative investigations on risk behaviour among IDUs. Taken together, they indicated varying HIV prevalence among IDUs within and across different European cities over time, with reports of:

- ‘low’ (i.e. under 5 %) and ‘stabilised’ prevalence in Belgium (Todts et al., 1997), former East Germany (Hamouda et al., 1993), Greece (Papaevangelou et al., 1991), Lund and Stockholm, Sweden (Ljungberg et al., 1991; Krook et al., 1997), Glasgow, Scotland (Taylor et al., 1994), and in London since 1994 (Stimson et al., 1996);
- fluctuations in ‘low’ to ‘medium’ prevalence over time (i.e. 5–20 %) in the cities of Amsterdam (van Ameijden et al., 1993), Berlin (Stark and Kleiber, 1991; Pant and Kleiber, 1993), Hamburg (Heckmann et al., 1993), Dublin (Johnson et al., 1994), Paris (Ingold and Toussirt, 1997) and London prior to 1994 (Rhodes et al., 1993; Stimson et al., 1996);
- ‘medium’ prevalence (20–40 %) in the cities of Rome (Abeni et al., 1998) and Edinburgh (Davies et al., 1995); and
- ‘high’ prevalence (over 40 %) in Milan (Nicolosi et al., 1992; Rezza et al., 1994), Madrid (Anchuela et al., 1994; de la Fuente et al., 1994), and in Edinburgh prior to about 1991 (Robertson et al., 1986).

These studies also provided an indication of the extent and frequency of HIV risk behaviour among IDUs, particularly concerning the continued use of shared injecting equipment and what were considered relatively high levels of unprotected sex among IDUs (Kokkevi et al., 1992; van den Hoek et al., 1992; de la Fuente et al., 1994; Rezza et al., 1994; Talyor et al., 1994; Davoli et al., 1995; Malliori et al., 1998).

Yet the contribution of epidemiology to understanding the distribution and determinants of HIV-related risk and disease was quickly found to be complicated by HIV infection being a behavioural disease (Stimson, 1990).

Of all ‘risk factors’ relevant to mapping the dynamics of HIV infection among IDUs, one of the most important is ‘risk behaviour’, particularly the shared use of injecting equipment and

unprotected sex. If the factors influencing HIV transmission were to be understood, it was apparent that the focus of research had to embrace the variety of individual, social and environmental factors which influenced IDUs' 'risk behaviours' (Roig Traver et al., 1987; McKeganey and Barnard, 1992a; Grund, 1993). This clearly required more than the mapping of viral spread among individuals and populations designated 'at risk', but also demanded the need to know how a variety of behavioural and contextual factors interacted to determine why and how injecting drug use and risk behaviours occurred (Romaní, 1991; 1992; Gamella, 1993; 1994; Rhodes, 1995; 1997).

Furthermore, in the first instance, little was known about HIV-related risk behaviours among IDUs. Little attention had been paid to the processes influencing, or the methods of, drug injection. Prior to the mid-1980s, there was hardly any published research describing the shared use of needles, syringes or other injecting equipment (Howard and Borges, 1970). It therefore became necessary to observe such practices in the natural settings in which they occurred and to describe them from the perspectives of drug users themselves. As shall be seen in the next three sections of this book, from the mid-1980s onwards, qualitative descriptions of risk behaviour have played a key role in informing epidemiological measures of HIV risk as well as focusing the attention of researchers and interventionists on the 'social meanings' and 'social contexts' of risk behaviour.

THE TIME OF WRITING

The public health imperative to reduce the risk of HIV associated with drug injecting has brought about renewed interest in qualitative research on drug use in some countries, and a recognition of the possibilities of qualitative research for the first time in others.

While an established tradition of qualitative research on drug use existed, to a varying degree, before the time of AIDS in the United

States, the Netherlands and the UK, this was not the case in many European countries.

In addition to increased interest in Germany (Noller and Reinicke, 1987; Noller, 1989; Kemmesies, 1995), Spain (Romaní, 1992; Gamella, 1993; 1994; 1997a; Pallares, 1996) and France (Coppel et al., 1990; Boullenger et al., 1991; Tellier and Sobel, 1994; Ingold, 1996; Ingold and Toussirt, 1997; Lert and Lert, 1998), there is emerging evidence of qualitative studies on risk behaviour associated with drug injecting in Belgium (Grieten, 1994; Delor, 1997) and Ireland (O’Gorman, 1998). Taken together, there is evidence of:

- established interest in qualitative research on drug injecting in the Netherlands and the UK;
- increased interest since the mid-1980s in Germany, Spain and France; and
- emerging interest since the early 1990s in Belgium, Ireland, Italy and Portugal.

FIGURE 5: QUALITATIVE RESEARCH ON HEALTH RISKS ASSOCIATED WITH INJECTING DRUG USE

Country	Established	Increased	Emerging	Scant
Belgium				
Denmark			■	■
Germany		■		
Greece				■
Spain		■		
France		■		
Ireland			■	
Italy			■	
Luxembourg				■
Netherlands	■			
Austria				■
Portugal			■	
Finland				■
Sweden				■
United Kingdom	■			

There is currently scant evidence of published qualitative research on the risks associated with intravenous drug use in Denmark, Greece, Luxembourg, Austria, Finland or Sweden (Figure 5).

More recently, interest has shifted from an almost exclusive focus upon the risks associated with HIV infection towards a broader consideration of health risks associated with drug injecting. IDUs may face a variety of health problems related to their drug use. In particular, the blood-borne viruses hepatitis B and C are prevalent among IDUs in most EU countries (EMCDDA, 1999a), while other everyday health risks associated with drug injecting include secondary infections and vein damage associated with the injection of 'non-injectable' drugs (such as physeptone tablets and temazepam) and impurities contained within drug solutions. Such practices increase the likelihood of septicaemia, abscess, thrombosis and endocarditis.

In addition, there is a growing interest in qualitative studies examining IDUs' experience and management of overdose (Kemmesies, 1995; Rhodes, 1995; Neale and McKeganey, 1997). This reflects the fact that overdose is one of the most important risk factors in mortality among IDUs in Europe. The multiple adverse health consequences associated with drug injecting have led to a focus in qualitative research on the health lifestyle contexts of IDUs more generally, and of how the lifestyle context influences proximity to risk.

The role of qualitative research

INTRODUCTION	42
RESEARCHING HIDDEN POPULATIONS	42
UNDERSTANDING THE EXPERIENCE OF DRUG USE	44
UNDERSTANDING THE SOCIAL CONTEXTS OF DRUG USE	47
INFORMING QUANTITATIVE RESEARCH	49
QUESTIONING QUANTITATIVE RESEARCH	50
DEVELOPING EFFECTIVE RESPONSES	53
MULTIPLE ROLES, MULTIPLE METHODS	55

INTRODUCTION

At its most fundamental, qualitative research on drug use can be envisaged as a means of understanding the lived experiences and meanings of drug use from the perspectives of drug users themselves. Additionally, as a means of understanding action as socially organised, qualitative research aims to understand how the lived experiences and meanings associated with drug use are influenced by different social, cultural and economic contexts.

At the outset, qualitative research aims to describe the 'context-based' nature of drug use and the social meanings such behaviours are perceived to have. Qualitative research thus proceeds on the assumption that it is possible to gain an insight into the factors producing social behaviour, primarily through engaging with participants themselves (Goffman, 1961; Denzin, 1970; Agar, 1980). The aim is to describe 'how individuals perceive, construct, and interact within their social and economic environment' (James, 1977, p. 180).

RESEARCHING HIDDEN POPULATIONS

Conducting research among 'hidden' populations has implications that are at once methodological and practical. Illicit drug use is a 'hidden' activity and, in most countries, the majority of drug users remain hidden from treatment and agency-based services.

Those in contact with services are often unrepresentative of the broader population of drug users, and this may be the case with regard to patterns of drug use, risk behaviour and health status. This has led researchers to consider research methods and sampling designs capable of reaching 'hidden populations' whose 'membership is not readily distinguished or enumerated based on existing knowledge and/or sampling capabilities' (Wiebel, 1990, p. 6).

Trust and rapport are also critical when attempting to reach those who 'live on the margins of a society that is hostile to them' (Bourgois, 1995, p. 13). Wiebel (1990, p. 5) notes that qualitative research is often 'the only means available for getting sensitive and valid data from otherwise elusive populations'. Qualitative methods, as the historical description of North-American ethnography in the previous chapter emphasised, are ideally placed for providing rich descriptions of hidden populations and behaviours:

'By design, ethnography is a methodology that incorporates rapport-building, self-disclosure, non-judgmental sensitivity, genuine concern with the insider's perspective and experience, and involvement in the lives of study participants into its approach and data collection.' (Singer, 1999, p. 32).

In addition to drug ethnographies, qualitative sampling methods have proved invaluable for conducting community-based surveys of drug use. Overcoming problems of access, recruitment, bias and trust has encouraged considerable methodological innovation in sampling and research design (Lambert, 1990; Carlson et al., 1994; Council of Europe, 1997; Sifaneck and Neaigus, forthcoming). A key characteristic of such innovation is the use of ethnographic theoretical sampling techniques emphasising inductive approaches to the targeted social network; these would include snowball, purposive, and quota sampling (Biernacki and Waldorf, 1981; Kaplan et al., 1987; 1990; Carlson et al., forthcoming).

In the absence of pre-existing or 'representative' sampling frames, sampling methods in surveys of drug use largely utilise data from multiple sources in order to target theoretically driven quotas of drug users and/or social networks using a variety of 'chain-referral' techniques (Biernacki and Waldorf, 1981; Cohen, 1989; Diaz et al., 1992; Hendriks et al., 1992). Emphasising theoretical and methodological realism over scientific idealism, such approaches commonly use ethnography to inform the development of numeric sampling quotas in particular geographical or social environments, as well as in participant recruitment and follow-up (Carlson et al., forthcoming).

The use of ethnographic fieldworkers and key informants, including those with ‘indigenous’ or ‘privileged’ access, has become a common feature of such designs, aiming to maximise access and rapport as well as ethnographic description (Hughes, 1977; Hendriks et al., 1992; Griffiths et al., 1993; Power, 1995). While the use of snowball-sampling methods borrows from ethnographic methods, particularly as far as gaining access, rapport and informing sampling design is concerned, such studies need not be ‘ethnographic’ in the data they collect or in the analyses they undertake. However, qualitative sampling methods have become key features of quantitative studies of drug use (Biernacki and Waldorf, 1981; Carlson et al., 1994; forthcoming).

UNDERSTANDING THE EXPERIENCE OF DRUG USE

Behaviours communicate social meanings. Two key tenets of qualitative research are to describe the social meanings participants attach to drug use experiences and the social processes by which such meanings are created, reinforced and reproduced (Moore, 1993; Rhodes, 1995; Agar, 1997).

Illicit drug use is a social activity, and the process of drug-taking derives symbolic importance, and has social meaning, depending on the contexts of use (Becker, 1953; Grund, 1993). Qualitative research is therefore concerned with descriptions of how drug use is ‘lived’ and interpreted through social interactions.

Whereas epidemiological research concentrates on delineating the distribution of patterns of drug use and its consequences, qualitative research aims to appreciate why and how such behaviours occur (Rhodes, 1995).

Due to their inductive and iterative approach to data collection and hypothesis generation (Znaniecki, 1934; Layder, 1993), qualitative methods are ideally suited to describing the ‘lived experi-

ence' of drug use from participant perspectives. Whereas deductive designs, as well as most quantitative research, tend to be construct-driven — defining categories or variables of interest a priori on the basis of pre-existing hypotheses and theoretical frameworks — inductive designs aim to construct interpretations on the basis of data as they emerge from participant descriptions and observations (Agar, 1980; Layder, 1993).

Figure 6 shows six key stages in an inductive approach. To oversimplify, the ethnography of drug use is data driven, and thus hypothesis-generating, leading to the discovery of subjective meaning, whereas the epidemiology of drug use is construct driven, and thus hypothesis testing, leading to the charting of (presumed-to-be) objective measures of drug use.

One of the most incisive examples of how induction led to capturing understandings of drug use based on drug users' own experiences is Lindesmith's seminal study 'Opiate addiction' (1947). Lindesmith based his inductive analysis on his attempt to discover negative evidence for his emerging generalisations (Silverman,

FIGURE 6: SIX KEY STAGES IN ANALYTIC INDUCTION

- An approximate definition of the phenomenon to be explained is formulated
- A hypothetical explanation of that phenomenon is formulated
- One case is studied in the light of the hypothesis, with the aim of determining whether or not the hypothesis fits the facts in that case
- If the hypothesis does not fit the facts, either the hypothesis is reformulated or the phenomenon to be explained is redefined so that the case is excluded
- Practical certainty may be attained after a small number of cases has been examined, but the discovery of negative cases disproves the explanation and requires a reformulation
- This procedure of examining cases, redefining the phenomenon and reformulating the hypothesis is continued until a universal relationship is established, each negative case calling for a redefinition, or a reformulation

Source: Denzin, 1970, p. 195; Silverman, 1985, p. 112.

1985). Using such an approach, Lindesmith discovered that the experience of opiate addiction had a social rather than merely physiological basis (Lindesmith, 1947). His original hypothesis had been that addiction was associated with a knowledge of the drug being used and a sufficient history of use to produce withdrawal effects. However, the discovery of negative cases led Lindesmith to reformulate his hypothesis to one which related addiction, not to withdrawal distress per se, but to the use of the drug after withdrawal had occurred for the purposes of alleviating perceived distress (Silverman, 1985, p. 112). No negative cases to this revised hypothesis were found, and the conclusion was reached that an 'addict's craving for opiates is born in his experience of relief of withdrawal' (Lindesmith, 1968, p. 100):

'Addiction rests fundamentally upon the effects which follow when the drug is removed, rather than on the positive effects which its presence in the body produces ... If the individual fails to conceive of his distress as withdrawal distress brought about by the absence of opiates, he cannot become addicted.' (Lindesmith, 1947, p. 165).

What Lindesmith termed the systematic search for a 'decisive negative case' (Silverman, 1985), in order that his emerging hypotheses were 'grounded' in his data, led to him proposing what was probably the first definition of addiction 'derived from ethnographic research' (Feldman and Aldrich, 1990, p. 18). Lindesmith had proposed a 'social theory' of addiction based on drug users' experiences. Adopting an inductive approach had led to the discovery of the unexpected. Addiction was no longer merely considered a product of 'dependence-producing' drugs but of whether and when drug users stopped using drugs (Singer, 1999):

'The failure of addicts to "kick the habit" permanently is doubtless tied up with their reluctance to abandon old associates and a familiar environment. The use of drugs is much more than a biological matter or a mere question of pharmacology.' (Lindesmith et al., 1975, p. 571).

While most contemporary qualitative studies on drug use are inductive, they also tend to be open to pre-existing empirical dis-

coveries as well as to policy directives. The analyses they produce are rarely limited by the empirical discoveries made within the study but are most likely to be guided by them in the context of other forms of knowledge (Layder, 1993).

This is a more ‘open’ approach to grounded analysis than that championed by the grounded theory approaches proposed by Glaser and Strauss (1967) and is better suited to studies which prioritise producing findings of policy relevance over generating formal theories of addiction or risk behaviour. More recent studies, for example, have shown the value of inductive approaches in understanding needle and syringe sharing and the varying social meanings attached to such behaviours by IDUs (Murphy, 1987; Zule, 1992; Grund, 1993; Koester, 1996).

UNDERSTANDING THE SOCIAL CONTEXTS OF DRUG USE

The social meanings of behaviours are context-dependent. As has been noted, the aim of qualitative research is to understand the nexus of ‘meaning’ and ‘context’ (Agar, 1995; 1997). Here, the role of qualitative research is to distinguish how drug use patterns, and their meaning and interpretation, differ by social, cultural and economic context. The ‘social context’ of drug use is made up of an interplay of factors, including:

- individual and group subjective interpretations of drug use;
- the physical, interpersonal and social settings in which drug use occurs; and
- wider structural and environmental factors.

Building on notions of social interactionism — the study of how the social meanings of behaviour are created and reinforced through social interaction itself (Denzin, 1970) — ‘social context’ is viewed as a key process influencing how the meanings and practices of drug use are ‘socially organised’ (Becker, 1963; 1970).

A variety of studies have illustrated how individuals' beliefs and interactions associated with drug use are influenced by context. The meanings and practices of needle and syringe sharing, for example, have been found to depend on:

- the influence of perceived social or network norms and expectations (Power et al., 1996; Rhodes and Quirk, 1996; Wiebel, 1996);
- particular interpersonal and social relationships (Zule, 1992; Barnard, 1993a);
- the physical and social settings in which drug use occurs (Ouellet et al., 1991; Ruggiero, 1992; Turnbull et al., 1996; Wiebel, 1996); and
- wider structural, economic and policy factors (Murphy, 1987; Pearson, 1987; Grund et al., 1992a; Gamella, 1994; Bourgois, 1997).

A number of European studies have illustrated how the micro and macro settings in which drug use occurs influence patterns of drug use and drug-using lifestyles, as well as the health and social risks related to drug use (Arlacchi and Lewis, 1990a; 1990b; Ruggiero, 1992; Bless et al., 1995; Kemmesies, 1995; Blanken et al., 1996).

Studies by Pearson (1987), Gamella (1994; 1997a) and Fraser and George (1988), for example, show how exogenous factors — such as policing, housing, and heroin availability — influence the social relationships maintained or lost within particular geographical or social networks, which, in turn, influence patterns of purchasing and dealing and the diffusion of new drug trends. Of key interest here is the dual importance of social relationships in mediating initiation and use and the influence of macro-contextual factors in creating or sustaining social relationships conducive to drug use (Pearson, 1987; Gamella, 1994).

In quite a different study, Henderson (1996) describes how patterns of ecstasy use are, to a large extent, 'socially organised' within the social mores of rave and dance club cultures. Like Becker's work on LSD and marijuana (Becker, 1953; 1970), she

finds that the behavioural manifestations of the effects of ecstasy are contained within this particular context. Other studies highlight particular cultural beliefs or ‘subcultures’ as important determinants of belief and perception associated with drug use, its effects and associated risks (Noller and Reinicke, 1987; van Gelder and Sijtsma, 1988; Noller, 1989). The social contexts of drug use mediate the social meanings and practices of drug use. Qualitative research, therefore, has a pragmatic contribution to make to the development of interventions and policies consistent with ideas of social and environmental change.

INFORMING QUANTITATIVE RESEARCH

A well-established role of qualitative research is to inform the design of quantitative measures of drug use. Here, qualitative research aims to inform the development of meaningful constructs or measures in quantitative studies, as well as to shape appropriate analyses and their interpretation (Wiebel, 1990; 1996). The identification and interpretation of injecting risk behaviours associated with HIV transmission provides an obvious example.

As will be discussed in the next section, the practices of ‘front-loading’, ‘back-loading’ (see pages 59–61) and other methods of ‘indirect’ sharing were identified on the basis of direct observations of drug injecting in Rotterdam (Grund et al., 1990; 1991). Similarly, ethnographic observations in Denver and El Paso identified a variety of other ‘indirect’ sharing practices at the time previously unexplored (Koester et al., 1990; Koester and Hoffer, 1994; Koester, 1996; Wiebel, 1996). In many cases, drug injectors were found to be unwittingly engaging in HIV-related risk behaviours (Wiebel, 1996).

In addition to identifying drug-use behaviours or theoretical constructs for subsequent epidemiological measurement, qualitative data play a key role in interpreting the findings generated by

quantitative research. It has been demonstrated, for example, that data from qualitative interviews may be used to help interpret and substantiate the findings of quantitative surveys and statistical models (Barnard and Frischer, 1995). While statistical modelling may identify correlational relationships between variables, it does not adequately assess why or how these relationships exist or explain what these associations mean. The triangulation of multiple methods and data sources, and the combined use of quantitative and qualitative methods in particular, enables the researcher to cross-check findings in order to increase the validity of interpretations (Denzin, 1970).

QUESTIONING QUANTITATIVE RESEARCH

As a complement to epidemiological research, which traditionally centres on the interplay between ‘agent’, ‘host’ and ‘environment’, qualitative research has been described as an attempt to provide a better understanding of how ‘host’ interacts with ‘environment’ (Agar, 1997).

Qualitative interpretations of the meaning and context of drug use are crucial for informing epidemiological studies. This has led towards developing ‘ethno-epidemiologies’ of drug use (Agar, 1995; 1997). These ethno-epidemiologies involve attempts to better situate epidemiological measures and analyses within ‘participant’ rather than ‘outsider’ frameworks of interpretation, as well as to encourage paradigm shifts in contemporary epidemiology away from an over-emphasis on ‘risk factor’ approaches towards emphasising the social–environmental determinants of drug use (Agar, 1995; Pearce, 1996; Susser and Susser, 1996).

As Agar indicates: ‘ethnography isn’t just a methodological add-on; it is a conceptual and theoretical means to a necessary epidemiological end’ (Agar, 1997, p. 1166). In this respect, ethnography and epidemiology converge, where the ‘failures’ of modern risk-factor epidemiology (Susser and Susser, 1996) encourage a

realisation of the need for epidemiological constructs to be ethnographically explored as well as for ethnography to inform the development of epidemiological measures:

‘The first need is to restore “host” and “environment” to central importance in epidemiological analysis, to defocus on “agent” and celebrate the two other corners of the epidemiological triad. From “host” it isn’t difficult to derive a focus on “meaning”, for it is a truism that human hosts live in a symbolic and material world. And it isn’t difficult to arrive at “context” from “environment”, since a concern with context reveals the layers of circumstance, ranging from immediate situation to political economy, in which the “hosts” shape their lives. The need to restore the importance of host and environment, then, requires the study of meaning and context. And the investigation of meaning and context is exactly the research task that ethnography is designed to accomplish.’ (Agar, 1997, p. 1166).

There is general consensus that quantitative methods can learn from qualitative methods, as well as vice versa, and that such methods provide a set of complementary tools to investigation (Hartnoll, 1995). There is agreement that ‘methodological identity’ should not be preserved at ‘the cost of greater understanding’ (McKeganey, 1995). However, the longstanding ‘divides’ between ‘qualitative–inductive’ and ‘quantitative–deductive’ approaches maintain for a reason. Every method, to some extent, shapes the findings it produces. Yet qualitative methods are arguably better suited to questioning deductive modes of explanation than the other way round (Pearson, 1995). Quantitative–qualitative differences are helpful if all methods are appropriately applied to the research question in hand and if each can be scientifically critical of the other (Hartnoll, 1995; Pearson, 1995).

An ethnographically informed epidemiology of drug use is a challenge which continues to escape most drugs research, and few contemporary epidemiological studies of drug use either attempt or adequately achieve an understanding of drug use in its environment (ACMD, 1998).

An important role played by qualitative research, therefore, is that it has the potential to question the application and interpretation of a priori epidemiological constructs, as well as the logic of deductive research (Moore, 1993; Rhodes, 1995; 1997; Bloor, 1997; Romani, 1997). This is particularly important, given the considerable resistance to paradigm shifts within epidemiology and the paradigm predominance of positivism more generally (Susser and Susser, 1996).

The tenets of induction and hypothesis-generation encourage analyses grounded in the perspectives of participants, of which the researcher is one. Qualitative research is both iterative and reflexive (Moore, 1993). In adopting a different epistemological logic to the deductive approach, it both complements as well as challenges the assumed objectivity of common sense understandings of drug use. Induction enables the discovery of plural — and competing — interpretations of drug use and addiction which often fall outside the interpretative frameworks championed by positivist and conventional epidemiological research.

As Moore has noted of his ethnography of recreational drug use, whereas dominant research and policy discourses talk of ‘drug-related ‘problems’ and ‘harm’ and how to reduce their incidence’, participants were found to emphasise the ‘benefits’ of drug use in their ‘talk of “big nights” and “speeding”’ (Moore, 1993, p. 17). Studies oriented to explorations in ethno-epidemiology have illustrated how ‘drug use’, ‘addiction’ and ‘problems’ associated with drug use are, in part, socially constructed by the paradigms, methods and findings of research (Grund et al., 1993; Bloor, 1997). Qualitative methods are, of course, not immune from this process (since all acts of research are forms of interpretation), but they aim to be reflexive about the process of interpretation and do not blindly purport to capture objectivity.

It is important to reiterate that drug users are the experts on their lived experiences of drug use. No research method or design has the capacity to capture objective empirical ‘facts’, and it is pretence or rhetoric which says otherwise (Moore, 1993).

A divide remains between applied qualitative and quantitative research in the drugs field (Heath, 1995; McKeganey, 1995; Pearson, 1995). Qualitative methods are undervalued, and rarely reach their potential, because they are commonly envisaged as a mere complement or supplement to positivist research (which is viewed as producing ‘hard’ or objective facts and as ‘real science’).

The challenge for the future clearly involves the use of multiple methods in drugs research and this also requires recognition of the paradigmatic differences underpinning induction and deduction. Not only is there a need to ground epidemiology within participant interpretative frameworks of what is meaningful, but there is an equal need to realise the contribution of qualitative research in questioning ‘expert’ understandings, the discourses of drug use within which they operate, and their perpetuation by an over-reliance on positivist paradigms.

DEVELOPING EFFECTIVE RESPONSES

The pivotal role of qualitative research in informing the design of drug interventions and policies is twofold. First, it is important to target interventions in cognisance with local drug use norms and practices. This also demands an appreciation of how different social and economic contexts influence drug use, as well as the drug user’s capacity for initiating and sustaining behaviour change. Second, an understanding of the social processes shaping everyday drug use is a necessary prerequisite for developing interventions which are meaningful and useful to drug users themselves. A wealth of research highlights the pragmatic contribution of qualitative research to intervention and policy development, particularly with regards to the design and evaluation of community-based initiatives (Hughes, 1977; Feldman and Aldrich, 1990; Brooks, 1994).

In keeping with the multiple roles of qualitative research summarised above, ethnographic contributions to drug intervention developments, including policy, have emphasised the importance of:

- understanding drug users' perceived needs for, and experiences of, interventions;
- understanding service providers' perceptions of service need, organisation and effectiveness; and
- exploring the social and contextual processes influencing the effectiveness of intervention delivery and impact (as with qualitative process evaluation).

Examples have included treatment ethnographies exploring drug users' experiences of methadone and other forms of drug treatment (Preble and Miller, 1977; Korf and Hoogenhout, 1990; Keene and Raynor, 1993; Rosado and Escursell, 1994; Lilly et al., forthcoming); help-seeking and service utilisation (Hartnoll and Power, 1989); general practice (McKeganey, 1988); health promotion and community interventions (Jamieson et al., 1984; Boullenger et al., 1991; Rhodes et al., 1991; Brooks, 1994; Grieten, 1994; Sheridan and Barber, 1996; Shiner and Newburn, 1996); responses to policy (Grund et al., 1992b; Agar, forthcoming); developing links between ethnography and community outreach (Hughes, 1977; Sterk, 1993; Wiebel, 1996); and understanding the impact of prison settings on drug use (Turnbull et al., 1996).

Here, then, qualitative research is viewed not as a means of knowledge generation for its own ends but as a means of 'action-oriented' research and intervention development (Coppel and Touzeau, 1988; Power, 1995; Stimson et al., 1999). The increasing receptivity to the use of qualitative methods is less indicative of wider paradigm shifts in method than it is an outcome of the realisation that qualitative research has immense practical utility for developing local responses to drug use (Feldman and Aldrich, 1990; Wiebel, 1996). This has led to developing models of qualitative 'action-research' (Coppel and Touzeau, 1988; Coppel et al., 1990; Power, 1995) and of 'rapid assessment and response' using multiple qualitative methods (Rhodes et al., 1999c; Stimson et al., 1999).

The development and evaluation of effective responses requires an understanding of the interplay between the meaning and context of drug use as well as of intervention need, feasibility and appropriateness. Qualitative research is ideally positioned to provide the data necessary for evidence-based practice.

MULTIPLE ROLES, MULTIPLE METHODS

The challenge for future drugs research is to recognise the pragmatic utility and methodological desirability of using multiple methods in order to encourage research which understands the epidemiology and the social context of drug use. Separating out inductive/deductive and qualitative/quantitative approaches is neither helpful nor appropriate in developing understandings of the interplay between individual, social and contextual factors influencing drug use (Agar, 1995; 1997). Each are different but both are required. Neither the ethnographer nor the survey researcher alone necessarily produces the data required to yield width and depth (Hammersley, 1992). Additionally, single-method studies run a higher risk of bias. More than this, they may be unaware of bias; of how the methods of data collection and analysis shape the findings produced. Every method reveals and conceals different aspects of the phenomena under study. A fundamental principle underpinning modern social science is therefore the use of multiple methods (Denzin, 1970).

In conclusion, there must be multiple roles for qualitative research in understanding and responding to drug use. We may view qualitative methods as a complement to quantitative methods, and may emphasise that all methods are tools for capturing different aspects of drug use and its consequences. The challenge for future drugs research is to enlist qualitative methods as fundamental components of multi-method studies of drug use. Qualitative methods, and more generally, inductive designs, complement their quantitative and deductive counterparts in capturing the interplay between the meanings and contexts of drug use.

If one challenge for future drugs research is to realise the opportunities afforded by multiple methods, a second challenge is to recognise the importance of developing 'ethno-methodological' studies of drug use (Agar, 1997). The need for multiple methods does not deny the differences between inductive and deductive designs; it uses such differences to aid interpretation and response. Qualitative research has an additional role to play: in questioning or challenging 'common-sense' interpretations of drug use that are often unwittingly reinforced and reproduced by positivist paradigms.

Seminal drug ethnographies of the past — such as Lindesmith's study, 'Opiate addiction' (1947) — point to the importance of generating ethnographically informed rather than a priori imposed understandings of drug use. In the absence of qualitative research, there is a danger of perpetuating understandings of drug use which are devoid of relevance or meaning for drug users. This, in turn, can encourage the formation of policy or the development of interventions which are inappropriate or ineffective and, at worst, counter-productive.

Understanding injecting risk behaviour

SHARING INJECTING EQUIPMENT	58
DESCRIBING SHARING PRACTICES	59
FUNCTIONS AND MEANINGS	62
SETTINGS AND CONTEXTS	65
POWER AND NEGOTIATION	68
CULTURES OF RISK BEHAVIOUR	69
OVERDOSE	71

SHARING INJECTING EQUIPMENT

Encouraging a reduction in needle and syringe sharing is a cornerstone intervention of public health strategies targeting IDUs in most EU countries (EMCDDA, 1999a). Surveys associate syringe distribution, exchange and availability with declines in levels of needle and syringe sharing and reduced risk of HIV transmission (Hunter et al., 1995; Hurley et al., 1997; Des Jarlais et al., 1998).

A key qualitative research question, however, is why, and under what circumstances, does sharing continue to occur? Even a glance through the existing research literature highlights an interplay of individual, social and material factors associated with needle and syringe sharing. The act of sharing a syringe is not merely dependent on individuals' risk awareness and perceptions, but on a variety of social and contextual factors influencing needle and syringe availability, social norms with respect to drug use practices and the interpersonal negotiation of risk behaviour and reduction (Murphy, 1987; Grund et al., 1992a; Koester, 1994; Hurley et al., 1997). If interventions are to encourage further reductions in needle and syringe sharing among IDUs, there is a need to take account of how different social situations and contexts impinge on, or encourage, attempts at risk reduction.

The first task facing qualitative researchers of HIV-related risk behaviour among IDUs was to describe and define sharing practices. While epidemiological evidence had identified needle and syringe sharing as one of the most important risk factors mediating HIV transmission among IDUs (Oppenheimer, 1992), little was known about IDUs' sharing practices except for a relatively obscure study on needle sharing in San Francisco (Howard and Borges, 1970). At this time, the reasons why IDUs shared injecting equipment, beyond reasons of general unavailability, was something of a mystery. By the late 1980s, it had become the task of observational and interview studies to discover the circumstances in which sharing took place, the factors motivating it, and its frequency and extent.

DESCRIBING SHARING PRACTICES

Qualitative studies have highlighted the diversity and complexity of ‘sharing’ practices. Perhaps the most incisive studies in this respect are those undertaken by Grund and colleagues in Rotterdam, and Koester and colleagues in Denver (Grund et al., 1990; 1991; 1993; 1996; Koester et al., 1990; Koester and Hoffer, 1994; Koester, 1996). Between them, these studies systematically ‘unpacked’ multiple forms of ‘syringe-mediated drug sharing’ (Grund et al., 1996). As Koester said of his observational studies on injecting drug use:

‘... the ethnographer learns by being there, by seeing what people do, by listening to what they say, and by experiencing at first hand the factors that influence their lives.’ (Koester, 1996, p. 133).

Based on a series of observations of how IDUs go about mixing, dividing, distributing and injecting drug solutions, Koester and Hoffer identified nine distinct types of injecting equipment sharing in addition to directly sharing a previously used needle or syringe.

As listed in Figure 7, these practices, each of which may carry a risk of transmitting blood-borne viruses, included the shared use of rinse water, cookers, mixers and cotton filters, as well as ‘front-loading’ and ‘back-loading’. They termed these practices ‘indirect sharing’, to distinguish them from the ‘direct use of a single syringe by two or more IDUs and to suggest their more masked character’ (Koester, 1996, p. 135). These findings encouraged Koester to reach the following conclusion:

‘With the inclusion of ethnographic research as an integral component of HIV epidemiology, our understanding of both syringe sharing and these other potential injection-associated risks has increased significantly ... Ethnographic research on the process of drug injection has revealed a range of injection-associated practices that may place IDUs at risk of HIV even when they use their own syringes to inject.’ (Koester, 1996, p. 145).

FIGURE 7: 'INDIRECT SHARING': AN ETHNOGRAPHIC TYPOLOGY

- Rinsing previously used syringe(s) in a shared water container prior to drug preparation and injection
- Using one participant's syringe to draw up water for dissolving the drug
- Using the rubber internal end of a participant's syringe plunger to mix water with the drug
- Using one participant's syringe to measure and distribute a share of the drug solution to each participant (distribution then occurs through 'back-loading' or 'front-loading')
- Drawing each share of the drug through a common cotton filter
- Returning the drug solution to the common cooker, or directly to another injector's syringe when an injector inadvertently draws up more than his/her share
- Returning the drug solution to the cooker or directly into another's syringe to 'kick them out a taste'
- 'Beating a cotton' that others have placed their needles in to draw up their dose
- Rinsing a used syringe in water in which others have previously placed used syringes for mixing and rinsing

Source: Koester, 1996, p. 135.

Koester's studies in Denver illustrate the critical role of qualitative research in describing behaviours which are potentially risky with respect to the transmission of HIV and hepatitis B or C virus infection. Without such rich description, it is possible that epidemiologically derived definitions of transmission risk may lack the specificity required to adequately capture the nuances and complexity of risk behaviour. This point is reinforced when one considers the ethnographic discovery of 'front-loading' and 'back-loading'. While both are included in Koester and Hoffer's typology of 'indirect sharing' practices, these were identified some years earlier on the basis of a series of 95 observations with approximately 192 IDUs in 14 different houses or squats in Rotterdam (Grund et al., 1990; 1991).

Grund noted that approximately 80 % of observed sharing occasions involved what he termed 'strepjes delen' or 'front-loading'

(Grund et al., 1991). This is where a single preparation of a drug solution is shared equally by loading the solution from one syringe barrel directly from the front of another (its needle having been detached).

‘Back-loading’ is this process in reverse, where the solution from one syringe is injected into the back of another (its plunger having been removed). These ethnographically defined practices soon entered the battery of epidemiological measures of injecting risk behaviour and associated HIV transmission (Samuels et al., 1992; Jose et al., 1993). A description of ‘back-loading’ based on observation field notes is contained in Figure 8.

Ethnography has played a critical role in informing, refining and questioning epidemiological measures of risk behaviour. More recent examples concern the identification of HIV risk practices associated with the distribution and production of liquid opiate drugs in parts of eastern Europe (Rhodes et al., 1999b). The most commonly injected opiates in the Ukraine, for example, are kitchen-based domestically produced derivatives of poppy straw, often termed ‘chorny’ (black) or ‘khimiya’ (chemistry). Liquid ‘amphetamine-like’ drugs, known as ‘vint’ (screw) or ‘belie’ (white), are also domestically produced from ephedra (which grows wild) or ephedrine (extracted from cough syrup).

FIGURE 8: ‘BACK-LOADING’, AS OBSERVED IN A NATURAL SETTING

The drug solution is in one of the insulin syringes. She pulls the plunger out of the other syringe and holds the barrel almost horizontal. Slowly, she squirts half of the solution into the back opening. ‘You need to do it very precisely. It must not go in all the way, otherwise you fuck up.’ Just as she explains, the liquid accumulates about 1 cm from the back of the needle. She puts down the donor syringe, picks up the plunger and carefully holds it against the opening. In one smooth movement she pushes the plunger a little into the barrel, while simultaneously turning the needle upwards. ‘This is the crucial move,’ she explains. ‘I’ve seen several people blow shots doing it, squirting the shot into the air. Mostly when they were sick, shaking hands, you know.’

Source: Grund et al., 1996, p. 693.

Observations in Russia and the Ukraine point to the possibility of HIV entering the production process via containers and mixers used to collect, decant and mix the solution ingredients (which may include industrial solvent, acetic anhydride, vinegar, soda, water) (Burrows et al., 1998).

Additionally, the rapid spread of HIV in some eastern European countries may be associated with the methods by which drug solutions are distributed (Rhodes et al., 1999b). In Russia and the Ukraine, two common methods include the distribution of drug solutions in ready-filled syringes (consumers purchase the ready-filled syringe), and the distribution of solutions via ‘front-loading’ directly from a dealer’s donor syringe (dealers may carry 10 or 20 ml syringes and/or separate containers of solution from which to refill donor syringes). These modes of distribution may be influenced by local environmental factors, including:

- geography (where drug production and distribution sites are separate);
- ease of transit of drug solutions to distribution sites;
- the need for rapid transactions between consumers and dealers; and
- ease of measurement of the amount of distributed solution.

Taking these examples together, one can appreciate that qualitative descriptions of the processes of drug production, preparation, distribution and injecting are of crucial importance in developing sensitive measures of risk.

FUNCTIONS AND MEANINGS

While epidemiological studies note the potential HIV transmission risks of indirect and direct sharing practices, they may fail to adequately capture their functional or social dimensions. Such practices are often habituated as part of the ‘everyday’ routines of drug injection, and are situated within the specific contexts in which injecting occurs.

First, sharing practices are functional. Principal here is the ‘need to cope with one’s craving for drugs’ in a context of scarce or inadequate availability of clean injecting equipment (Mata and Jorquez, 1991).

Figure 9 shows a number of contextual factors commonly associated with needle and syringe sharing by IDUs, including withdrawal. As Grund and colleagues have noted of front-loading in Rotterdam, it serves an ‘instrumental function in preventing withdrawal’:

“Helping” with a *betermakertje* (a little dose to ameliorate withdrawal) is a common motivation for drug sharing. The term “helping” is an everyday expression referring to the revered rule of aiding a fellow user who is in withdrawal. Likewise, drugs are frequently brought together and subsequently shared by front-loading.’ (Grund et al., 1993, p. 80).

Second, qualitative studies illustrate that the sharing of drug solutions and injecting equipment is more than pragmatic or economic, since these practices are embedded within a wider social dynamic of behaviours which are responsive to shared rules and norms in drug-user relationships. Sharing also functions as a symbolic act, influenced by the social functions and meanings such practices have for participants (Murphy, 1987; Grund et al., 1993; 1996; Gamella, 1994; Grieten, 1994).

Principal among these is the communication or display of reciprocity and trust within social relationships (McKeganey and Barnard, 1992a; Zule, 1992; Barnard, 1993a). Ethnographic work on ‘indirect sharing’, for example, has shown that the social values or meanings attached to such activities range from the trust and assurance gained from the equal sharing of drug solutions (as with front/back-loading) to the giving and receiving of ‘gifts’ (as with the borrowing of used filters containing residual drug solution) (Koester, 1996; Power et al., 1996).

Sharing drug solutions or injecting equipment may come to be collectively viewed as symbolic displays of reciprocity in interpersonal or group relationships and not merely as pragmatic

FIGURE 9: SOME REASONS FOR NEEDLE/SYRINGE SHARING

Lack of availability

‘The syringe got really blunt and I couldn’t use it anymore.’

Withdrawal

‘I was ill and in need of some heroin. I would have killed my granny to get a syringe by that stage.’

Unawareness that the equipment had been used

‘I took it from his box by accident instead of mine. And it was bloody open and I bloody used it thinking it was mine.’

Intoxication

‘I was out of control.’

Social proximity to sharing partners

‘If they were someone I didn’t know I wouldn’t have shared.’

Source: Rhodes, Quirk and Stimson, 1995.

ways of dividing up and using drugs. Qualitative studies have shown that the availability of needles and syringes is an important contextual factor but that it is not, in itself, a sufficient explanation for continued sharing. These studies encourage us to consider drug-sharing practices as social processes; as embedded within drug users’ wider social relationships more generally:

‘Addicts share many valued things such as housing, food, money, clothing and childcare. Often they help one another with daily problems associated with the addict life where sharing fits the broader context of coping with craving, needs for human contact and the hardships of life on the margins of society. In this context, the sharing of drugs serves as a strong symbolic binding force.’ (Grund et al., 1993, p. 383).

‘Drug sharing is at once a means to socialise, to belong, and to provide some measure of protection from the exigencies of *la vida loca*.’ (Mata and Jorquez, 1991).

That the sharing of drug solutions and injecting equipment has social meanings for participants highlights that multiple meanings of 'sharing' coexist. Here, the findings of qualitative research have been particularly instructive for studies of risk behaviour. Not only has research found that IDUs associate their sharing practices with meanings other than 'risk', they also indicate the inadequacy and inappropriateness of commonly applied epidemiological measures of 'sharing' (McKeganey and Barnard, 1992a).

A semi-structured interview study undertaken by Shelley and colleagues, for example, found that multiple and contradictory interpretations of sharing exist, with some IDUs understanding sharing only to mean the use of another's syringe during the same injecting episode. Qualitative work with IDUs on release from prison has also noted that 'sharing' may be temporally defined, with the use of equipment previously used during a different injecting occasion viewed as 'just using old works' (Turnbull et al., 1996).

SETTINGS AND CONTEXTS

Needle and syringe sharing is not a random activity, but instead may follow lines of kith and kin. This is clearly evident with respect to sharing in the context of sexual relationships. While epidemiological studies have tracked ongoing reductions in the extent of needle and syringe sharing, qualitative studies have highlighted that most continued sharing occurs within the context of long-term sexual relationships, close friends and family (Barnard, 1993a; Bloor, 1995; Rhodes and Quirk, 1996).

Local conditions of needle availability may influence the prevalence of such risk behaviour, but risk behaviours embedded within the structure of particular social relationships may be difficult to change, particularly when such change involves challenging the emotional fabric of relationships (Rhodes and Quirk, 1998). Drug solution and equipment sharing within the context of sexual relationships may be perceived as expressive of 'togetherness'.

It is common for qualitative studies to note that sharing with sexual partners has meaning other than 'risk' (McKeganey and Barnard, 1992a; Barnard, 1993a). As IDUs have said of sharing within sexual relationships: 'It's not really like sharing, is it?' (quoted in Rhodes and Quirk, 1996).

In addition to the particular social relationships influencing risk acceptability, studies note the importance of particular social and physical environments. In this respect, North-American research has focused on sharing within 'shooting galleries' (Ouellet et al., 1991; Wiebel, 1996). Ouellet and Wiebel describe how different Chicago shooting galleries have their own unique set of organisational norms or 'rules' for the renting out of injecting equipment. In 'cash galleries', the sale or rental of syringes is run like a business, where gallery operators establish a formal set of rules and enforce compliance. In 'taste galleries', which usually operate from an injector's room or apartment, reciprocity is less formalised, and the operator is normally given a small portion, or a taste, of the drugs in exchange for a safe place to inject or the equipment borrowed. In 'free galleries' (often found in abandoned buildings), there is no commodity exchange.

Different gallery environments were found by Ouellet and Wiebel to impinge directly on individuals' risk perceptions and behaviour (Ouellet et al., 1991; Wiebel, 1996). In free galleries, for example, there was rarely running water available. This meant that containers of water for mixing, shooting and rinsing were left at gallery sites. There was, as a consequence, a risk of HIV transmission through the sharing of contaminated water. Whereas cash galleries were found to be generally receptive to HIV prevention initiatives, and often provided bleach, clean water and containers for syringe disposal as part of the service, many taste galleries were closed operations which remained inaccessible to health outreach workers. One of the conclusions of this research was that the social context of shooting environments are of crucial importance in understanding group risk behaviour norms and practices (Wiebel, 1996).

There has been considerable European interest in the prison 'risk environment'. Exploration of the dynamics of sharing in prisons

has underlined the greatly increased risks of HIV spread (Sueur, 1993; Taylor et al., 1995; Magliona and Sarzotti, 1996; Turnbull et al., 1996; Bouhnik and Touzé, 1997; Abeni et al., 1998).

As illustrated in Figure 10, qualitative studies have pointed to the fact that the prohibition of injecting equipment in prison settings may not deter prisoners from sharing; many may see themselves as having 'no choice' but to share (Turnbull et al., 1996).

FIGURE 10: PRISON AS A RISK ENVIRONMENT

'He asked me if I wanted some works [needle/syringe] . . . I asked him if it was a new works, and he went "no", and he said "there's only two people that's used it". I went "yeah, all right, forget that".'

'I had to sharpen it (the needle) with a matchbox. A needle in there costs GBP 10. I didn't have that kind of money.'

'You've got no choice if you're used to injecting . . . I inject drugs. I have done for 10 years. You can't change overnight, especially in there.'

Source: Turnbull, Power and Stimson, 1996, p. 256.

Qualitative studies of sharing practices within the context of particular social or sexual relationships, and within particular 'high-risk' environments, provide examples of how the 'micro-contexts' (or settings) of drug injecting influence individuals' proximity to risk. Additionally, some studies have considered the impact of different 'macro-contexts' on risk behaviour. Grund and colleagues, for example, compared ethnographic data on the contexts of drug injecting in Rotterdam and the Bronx, New York (Grund et al., 1992a). They suggest that the differential rates of injecting risk behaviours and the extent to which informal support networks exist among IDUs differ on account of the wider social and political contexts of the two cities.

It is, therefore, important to note that the social settings in which drugs are injected, and the influence such settings have on IDUs' capacity for risk reduction, are themselves shaped by wider structural and political factors, such as drug-enforcement activities, geography and housing (Arlacchi and Lewis, 1990a; Gamella, 1994; 1997a).

As noted earlier, the studies by Gamella in Valdemina, Madrid, provide an example. These illustrate how proximity to risk associated with drug injecting was linked to two neighbourhood factors which occurred prior to the emergence of HIV. The first was that pharmaceutical drugs were available in local pharmacies long before young people developed an interest in using them. The second was that, over time, for primarily economic and social reasons, these drugs began to be injected. This, in turn, led to the increased injection of heroin, by which time the ‘social diffusion’ of drug injecting practices had coincided with the presence of HIV. This study views key aspects of the social context, including economic, geographical and other structural factors, as determinants of HIV risk associated with patterns of drug injecting.

POWER AND NEGOTIATION

While qualitative research points to most sharing between IDUs as a positive response to the rights and obligations of social relationships, this should not blind us to the fact that some of the relationships which pattern needle and also drug sharing ‘embrace fear and domination rather than intimacy and trust’ (Bloor, 1995, p. 66). This leads us to consider power as an additional contextual variable influencing risk behaviour. Patterns of drug and equipment sharing, as well as opportunities for risk reduction, are often expressive of the distribution of power in relationships (Bloor, 1995; Rhodes and Quirk, 1996; 1998), and along gender lines in particular (Barnard, 1993a; Klee, 1993; Taylor, 1993).

A number of studies suggest that female IDUs are more likely only to share needles and syringes with their male sexual partners — often after their male partners have used them first (Freeman et al., 1994) — while men are more likely to share with other male friends (Rua-Figueroa et al., 1992; Barnard, 1993a).

Qualitative studies have shown that wider perceptions of gender roles, and an unequal distribution of power between men and

women in relationships, may extend to patterns of risk and responsibility regarding drug use (Taylor, 1993), including gaining access to clean injecting equipment (Barnard, 1993a). One study in Dundee, Scotland, for example, found a connection between domestic violence and HIV risk behaviour (Aalto and MacRae, 1997). This study found that challenges or questions by female IDUs about the risk behaviour of their male partners may sometimes be perceived as a threat to the status quo of relationships, which could, and often did, result in violent reprisal. The distribution of power in relationships, and thus also of risk negotiation, may therefore be 'gendered' (Coppel, 1989; Barnard, 1993a; 1993b; Zurhold, 1993).

To date, there has been little European qualitative research focusing on the role of conflict and dominance (both within relationships and within IDU social hierarchies) in the negotiation of drug use or sexual risk behaviours among IDUs. However, studies describing the more 'predatory' aspects of IDU sub-cultures indicate that conflicts over drugs can be commonplace (Grund et al., 1996).

Some UK-based qualitative research has shown arguments and conflicts over the shared distribution of drugs to feature in couples' relationships where both partners are regular drug users (Rhodes and Quirk, 1998). Such conflicts are probably most likely where both partners are drug-dependent and where resources are scarce. At some level, these conflicts and their potential for their violent resolution may influence HIV risk behaviours.

CULTURES OF RISK BEHAVIOUR

Qualitative research has highlighted that the difficulties IDUs have in achieving safer injecting can no longer be considered as merely an outcome of the lack of availability of clean injecting equipment or a lack of knowledge of the risks entailed. They may

relate more fundamentally to the dynamics of drug dependency and the complex set of social ties and obligations characterising IDUs' social and sexual relationships.

Crucially, as Grund and colleagues (1996) have pointed out, drug-related sharing (with its associated risks of blood contamination) may function as an integral part of the IDU 'subcultures'. Characteristic of many interactions associated with the buying, dividing and using of drugs, the sharing of injecting equipment may be a particularly potent expression of the 'almost universal subcultural code of "share what you have"' (Grund, 1993).

The 'risk culture' of IDU subcultures comprises a combination of social and structural factors. Although what Grund describes as the 'almost universal sub-cultural code of sharing' has been found to exist for economic reasons (as with the availability and affordability of clean syringes), it is also associated with the criminal and socially stigmatised nature of drug dependency (Noller and Reinicke, 1987; van Gelder and Sijtsma, 1987; Noller, 1989; Kemmesies, 1995). In the face of constant adversity and external pressure, IDUs are mutually dependent upon each other, both positively and negatively, for information and help in locating and financing drug use as well as the management of drug use. This 'dependency' has been noted elsewhere, in ethnographic studies by Bourgois (1997) and Power and colleagues (1996).

While useful in some respects (to stave off withdrawal, to share costs), drug sharing has been observed to perform a wider set of more social functions. So, for example, drug sharing might be used to mediate and resolve conflicts, to make and sustain alliances, and to compensate for previous violations between IDUs (Grund et al., 1991; 1996; McKeganey and Barnard, 1992b; Rhodes and Quirk, 1998). The social character of drug and injecting equipment sharing and its ascribed social value within IDU networks and relationships greatly adds to the difficulties of reducing the risks associated with these behaviours.

OVERDOSE

At this point, it may be concluded that risk perceptions associated with sharing practices, as with any risk behaviour, are 'relative' and 'situated' concerns (Rhodes, 1995; 1997). In understanding the meaning and context of injecting risk behaviours from the perspectives of drug injectors themselves, it becomes possible to understand the relative priority given to particular risk behaviours and, in turn, the likely acceptability of risk-reduction interventions. Such research highlights HIV and hepatitis risks as relative concerns within a wider context of 'risks' and 'dangers' associated with drug injecting (Delor, 1997). This study, as most, has concentrated on injecting risk associated with needle and syringe sharing, but other relative risk concerns associated with injecting may include the following:

- general needle hygiene;
- vein damage;
- infections to the injecting site;
- the risks associated with making particular injections (for example, groin injections);
- the risk of purchasing fake drugs;
- the risk of arrest; and
- the risk of overdose.

In particular, there is evidence — particularly among Australian researchers — of increased interest in the risk management and experience of overdose. Qualitative research on overdose might be identified as a key priority for future European research on risk associated with drug injecting. Overdose is a major contributor to the increased rates of mortality among IDUs in most European countries. Qualitative studies present opportunities for understanding the situational factors associated with overdose as well as for developing appropriate overdose prevention and risk management interventions. Concerted actions on HIV prevention among IDUs have been associated with encouraging behaviour changes, as well as stabilisation of HIV prevalence at low levels among IDU populations (Stimson et al., 1996). If low-cost

interventions can be shown to reduce risk associated with overdose and overdose-related fatality, it is likely that significant public health gains will be made.

UK qualitative research points to opioid overdose being viewed by IDUs as one of the 'main risks' associated with injecting but also as a 'legitimate' or 'acceptable' risk associated with everyday drug injecting (Rhodes, 1995). Recent Australian studies have illustrated that the design of community-level overdose prevention and risk management interventions are best informed by qualitative assessments of IDUs' perceptions of risk, their attitudes and responses to overdose, as well as their current overdose risk management and coping strategies (Centre for Information and Education on Drugs and Alcohol, 1997; Davidson and Moore, 1999; Loxley and Davidson, 1999). These studies have noted the scope for:

- targeted risk-awareness interventions (focusing on the risks of polydrug use in particular);
- skills-oriented interventions on risk management (focusing on first aid, including resuscitation); and
- peer-education interventions (both in the community and at hospital emergency departments).

Australian and UK studies (primarily quantitative) have also explored the feasibility of training IDUs in first aid and in distributing naloxone as a means of preventing overdose fatalities (Darke and Hall, 1997; Strang et al., 1999).

There is currently a dearth of European research on overdose risk management associated with drug injecting. The development of risk-reduction interventions in Europe would greatly benefit from a series of qualitative research projects focusing specifically on opioid overdose and its risk management.

Understanding sexual risk behaviour

UNPROTECTED SEX AND CONDOM USE	74
SEXUAL RISK PERCEPTION	75
THE SOCIAL MEANINGS OF CONDOM USE	77
THE SOCIAL CONTEXT OF RELATIONSHIPS	78
POWER AND NEGOTIATION	80
SEX WORK AND CONDOM USE	81

UNPROTECTED SEX AND CONDOM USE

The predominant focus of risk behaviour research among IDUs has been needle and syringe sharing. Fewer studies have focused specifically on sexual risk behaviour among IDUs, or on the interactions between drug injecting and perceptions of sexual risk. This is despite evidence pointing to the importance of sexual HIV transmission among IDUs (Battjes et al., 1994; Friedman et al., 1994). By the mid-1980s, however, a number of European qualitative studies sought to understand the HIV-related sexual risk behaviour of injecting drug users, sex workers and their sexual partners. Key studies arguably included:

- McKeganey and Barnard's 'AIDS, drugs and sexual risk' (1992a) in Glasgow;
- the studies in London on 'Drug taking and sexual lifestyles' by Rhodes et al. (1995); and
- the separate studies in Paris by Ingold and Coppel (Coppel et al., 1990; 1993; Ingold, 1996; Ingold and Toussirt, 1997).

These projects ran in tandem with other qualitative studies investigating the sexual behaviour of non-injecting populations (for example, Holland et al., 1991), as well as sexual risk management among people living with HIV infection, including IDUs (McKeganey, 1990; Carricaburu and Pierret, 1992; 1995; Tellier and Sobel, 1994; Delor, 1997; Cusick and Rhodes, 1999; Rhodes and Cusick, 2000).

Most surveys have shown scant indications of sexual behaviour change among drug injectors (van den Hoek et al., 1992; Friedman et al., 1994; Ingold and Toussirt, 1997). There is a general consensus in quantitative studies that the majority of IDUs 'never' use condoms with their primary sexual partners, and that a substantial minority (usually about a third) 'never' use condoms with their casual partners (Rhodes et al., 1993; Battjes et al., 1994; Friedman et al., 1994; Davoli et al., 1995; Malliori et al., 1998).

This is particularly the case in long-term relationships, or in relationships with 'primary' or 'regular' partners. Not only have qual-

itative studies supported the contention that sexual behaviour changes among IDUs have been less likely than changes in injecting risk behaviour, but they have lent additional insights as to why this is the case. Some of these findings are summarised below.

SEXUAL RISK PERCEPTION

One of the most important observations made by qualitative researchers is that risk is perceived as a relative concern (Coppel et al., 1990; McKeganey and Barnard, 1992a; Bloor, 1995; Carricaburu and Pierret, 1995; Rhodes, 1995; Delor, 1997). Studies highlight that IDUs perceive sexual risk in the context of a range of other risks and dangers, such as those associated with ‘addiction’, overdose or needle sharing, which may be perceived to be more immediate and more important (Rhodes and Quirk, 1996; 1998).

As illustrated in Figure 11, qualitative studies have highlighted that differential perceptions of risk exist between those associated with needle and syringe sharing and those associated with sexual risk behaviour, where risks associated with needle sharing are often given higher risk priority.

FIGURE 11: SEXUAL RISK PERCEPTION AMONG IDUS

‘I haven’t used condoms. That’s where I think people slip up.’
‘I’m in a situation where I am a drug user and don’t wanna share needles and forget about the sexual side, and think that I’ll be OK.’
‘I go out and get my syringes and they have a condom with them. But I can honestly say that if it came to it and I was in bed, I could quite easily go along with it, without a condom.’
‘We sleep together (without condoms) but I’d never share.’
‘I know he’s been around sexually but it was just the drugs I thought about.’

Source: Rhodes and Quirk, 1996, p. 166–167.

As a consequence, studies have found that IDUs' assessments of sexual risk are often more likely to be based on perceptions of risk about a partner's drug use rather than their sexual history. The sexual transmission of HIV may often be overlooked by IDUs (Delor, 1997). While drug injectors may refrain from sharing needles and syringes, they may continue to have unprotected sex, particularly with long-term partners (with whom they may refuse to share needles) (Rhodes and Quirk, 1996; Ingold and Toussirt, 1997).

In private sexual encounters, a key exception to this appears to be when one of the partners is known to be HIV positive (Friedman et al., 1994), although unprotected sex between HIV-positive IDUs and their positive or negative partners also occurs (Hickey et al., 1994). One qualitative study exploring sexual negotiation between HIV-positive drug users and their sexual partners, for example, found that over 60 % reported unprotected sex since their positive diagnosis (Rhodes and Cusick, 2000).

The common occurrence of unprotected sex in IDUs' relationships has led qualitative researchers to investigate the contextual factors associated with sexual risk perception and the negotiation of sexual safety.

These studies have aimed to describe the factors underpinning IDUs' differential perceptions of risk between needle and syringe sharing and unprotected sex. As noted below, they point to the importance of understanding the social meanings people attach to condom use and unprotected sex, the contextual factors influencing perceptions of 'sexual risk acceptability' in relationships, and the influence of power in sexual and relationship negotiation.

THE SOCIAL MEANINGS OF CONDOM USE

Condom use, like any human action, is the product of what can be termed a 'situated rationality' of risk perception (Bloor, 1995). As a symbolic act, the situated meanings communicated by unprotected sex — be these 'trust', 'commitment' or 'love' — may be temporally perceived to outweigh the potential HIV risks or harms. As observed by Sibthorpe in a study of condom use among IDUs, the meanings attached to condom use are 'socially constructed' (Sibthorpe, 1992).

This study showed how the social-historical constructions of condom use as being associated with sexually transmitted disease, protection and 'otherness' influence IDUs' perceptions of the meanings communicated by having protected sex. Whereas protected sex is associated with emotional distance, unprotected sex may be associated with the realisation of intimacy in relationships (Day, 1990; Holland et al., 1991; Wight, 1993). The acts of using, and of not using, a condom come to have symbolic value.

Studies show that most IDUs perceive unprotected sex to be a normal feature of heterosexual relationships. Perceived norms among IDUs may encourage safer drug use practices, yet perceptions of wider sexual norms may encourage unsafe sexual practices among IDUs (McKeganey and Barnard, 1992a; Sibthorpe, 1992; Rhodes and Quirk, 1996). In this situation, the normative social meanings attached to condom use in relationships — where unprotected sex may be viewed as communicating 'trust', 'commitment' or 'love', and protected sex is viewed as communicating the presence of 'risk', a 'temporary' relationship, and need for 'protection' — may have to change before IDUs' individual perceptions of sexual risk become malleable (Coppel et al., 1990; 1993; McKeganey and Barnard, 1992a; Ingold, 1996). Qualitative studies thus point to the importance of changing the wider sexual and social norms which influence patterns of condom use, which in turn influence IDUs' personal beliefs and behaviours.

One brief example helps to illustrate this point. This concerns the ethnographically derived notion of ‘unsafe protected sex’ (Quirk et al., 1998). Defined as the practice where condoms are used unsafely, two forms of ‘unsafe protected sex’ (UPS) identified by ethnographic research in London included:

- using condoms for ejaculation only; and
- using condoms after a limited amount of unprotected penetration has taken place.

As with the development of more sensitive measures of needle and syringe sharing based on ethnographic research (Grund et al., 1990; Koester and Hoffer, 1994; Koester, 1996), the identification of UPS to some extent questions the reliability and sensitivity of survey measures of sexual risk based simply on the frequency of condom use.

Additionally, it gives insight into the social meanings people attach to condom use. In the context of perceived social norms which legitimate unprotected sex as a normal feature of most drug users’ heterosexual relationships, some condom use may be perceived or rationalised as better than no condom use (Quirk et al., 1998).

UPS was found to suggest a progression from condom use to non-condom use in a relationship, and may thus have symbolic value in making ‘permissible’ a certain amount of unprotected sex, which, in turn, may make a transition towards non-condom use easier to justify and negotiate (Quirk et al., 1998).

THE SOCIAL CONTEXT OF RELATIONSHIPS

Just as particular contexts of drug use may ‘structure’ individuals’ injecting risk behaviour (Ouellet et al., 1991; Turnbull et al., 1996; Wiebel, 1996), particular social relationships fashion sexual behaviour norms. Studies have repeatedly shown that IDUs are more likely to use condoms in the context of their casual than

primary relationships, and that these differences are associated with the differential social meanings attached to protected and unprotected sex in heterosexual primary and casual encounters (Coppel et al., 1990; Day, 1990; McKeganey and Barnard, 1992a; Sibthorpe, 1992).

Such associations indicate how adherence to safer sex is, to some extent, dependent on the social context of sexual encounters. In many sexual relationships, particularly if they are viewed as 'primary', the perceived benefits of unprotected sex may be seen to outweigh the potential costs or risks (Ingold and Toussirt, 1997), and making a transition from condom use to non-condom use in long-term or 'serious' relationships has been found to be viewed by most heterosexuals as a 'normal' thing to do (Rhodes and Quirk, 1996). Qualitative studies suggest that breaking a precedent of condom use may provide a symbolic display that relationships have indeed become 'primary' or 'serious'. Whether or not condoms are used may thus help define the nature of a relationship.

The social context of relationships clearly has an important bearing on the social meanings people attach to condom use, as well as the ways in which condoms are used. This appears to be the case in both IDUs' and non-IDUs' relationships. A common finding across studies among IDUs, gay men and heterosexuals with no experience of drug use is that transition from condom use to non-condom use coincides with the development of a relationship as emotional, committed or serious, whereby the social meanings of condom use both define and communicate people's relationships as such.

The implication of this is that there remains a need for interventions to target changes in the normative social meanings of the condom as a symbol of non-commitment in relationships, as well as a need to target relationships, and not only individuals, as units of sexual behaviour change.

POWER AND NEGOTIATION

Studies of IDUs' sexual relationships have identified gender as a key factor influencing the potential direction of the spread of HIV (Coppel, 1989; Barnard, 1993a; 1993b). Many female IDUs are in relationships with men who are also IDUs. However, many men involved in drug injecting are in relationships with women who do not themselves inject or use drugs (Barnard, 1993a; Klee, 1993; 1996). Many of these women will not necessarily know about their partner's involvement in injecting drug use, at least at the outset, and often well into the relationship (Kane, 1991). The stigma attached to injecting drug use is such that disclosure is often avoided by many for as long as possible. Women are at substantial risk of HIV infection if their partner has shared needles and if condoms are not used.

80

• EMCDDA Insights Series 4 •

Research also suggests that power in sexual relationships is unevenly distributed by gender (Holland et al., 1991). This becomes particularly important in the context of the negotiation of condom use, and a number of studies emphasise that women may often find it difficult to initiate or negotiate condom use in relationships (Coppel, 1989; Coppel et al., 1990; McKeganey and Barnard, 1992a; Barnard, 1993a; 1993b).

Some studies have found that women's attempts to initiate condom use can result in emotional coercion towards unprotected sex and the threat of violence from their male partners, and in some cases physical violence is reported to have occurred as a consequence (Aalto and MacRae, 1997).

These findings highlight that interpersonal communication between women and men in sexual relationships is itself influenced by wider perceptions of gender role and gender inequality. They also highlight that the structure of relationships themselves is an appropriate factor in mediating risk reduction.

SEX WORK AND CONDOM USE

Public health anxieties as to the possible role played by prostitution in spreading HIV infection encouraged a number of studies which investigated risk behaviour associated with sex work. Most were epidemiological in orientation, concentrating on mapping the distribution of HIV transmission and risk behaviours among sex workers and their clients.

Two UK studies specifically concerned with the prevalence of HIV infection among prostitutes in London and Glasgow carried out anonymous saliva sampling (McKeganey and Barnard, 1992b; Ward et al., 1993). Both studies were also concerned with the sociology of sexual behaviour in the context of prostitution, as was one other ethnography of street and non-street prostitution conducted in Glasgow by Cusick (1998).

An additional study was carried out in Manchester by Faugier and colleagues (1992), which, while largely quantitative, also considered the social context of HIV transmission among IDUs involved in sex work, as have a number of qualitative studies in France (Coppell et al., 1990; 1993; Ingold, 1996). Two key ethnographies of the connections between drug use and prostitution also include the life history and lifestyle studies of the *heroine-prostitutie* undertaken, 10 years apart, by van de Berg and Blom (1987; 1997).

A substantial component of the study carried out in Glasgow by McKeganey and Barnard (1996) among street prostitutes was qualitative in orientation. Like the ethnographic work of Cusick in the same city (1998), this involved many hours of observation in sex work settings as well as in-depth interviews with prostitute women and their clients (McKeganey, 1994; McKeganey and Barnard, 1996). Both studies investigated the determinants of condom use in sex work settings as well as with non-paying sexual partners. It is a common finding of such studies that condoms are viewed as a symbolic marker distinguishing commercial sexual encounters from private ones (Coppel et al., 1990; Day, 1990;

Faugier et al., 1992; McKeganey and Barnard, 1996; Cusick, 1998). Whereas condom use may be considered a routine feature of sex in occupational settings, it may be considered inappropriate in private, primary relationships.

Although the majority of female sex workers report consistent condom use with clients, qualitative studies have sought to provide insights into the circumstances in which condoms are not used (Cusick, 1998). Such studies point to client non-compliance, as well as threatened or actual violence as key factors (Barnard, 1993b; McKeganey and Barnard, 1996). Evidence from the Manchester study also suggested that condom use was less consistent where the women involved were also IDUs (Faugier et al., 1992).

Taken together, the studies by McKeganey and Barnard (1996), van de Berg and Blom (1997), Faugier and colleagues (1992) and Cusick (1998) note an interplay between drug use and sex work in different occupational contexts, and the potential for sexual negotiation to be compromised by drug-related withdrawal or intoxication.

Conclusions

INTERVENTION DEVELOPMENT 84

RESEARCH DEVELOPMENT 88

INTERVENTION DEVELOPMENT

This publication has explored the role of qualitative research in understanding the lived experiences, social meanings and social contexts of injecting drug use and related risk behaviour. Here, we conclude by summarising the practical relevance of qualitative research findings for intervention and policy developments.

Meaning, context and response

Understanding the distribution and determinants of behavioural disease requires multi-method research approaches capable of capturing the interplay of individual and environmental factors which influence risk. The individual and public health harms most commonly associated with injecting drug use are, to a large extent, preventable through behavioural change. Yet many of the factors conducive to harm distribution or reduction are also beyond immediate individual agency or control. These include the micro- and macro- factors which make up local 'risk environments', of which national and local policy are important parts (Rhodes et al., 1999a).

It is therefore important to gain a close appreciation, especially from the perspectives of IDUs themselves, of the individual and contextual dynamics of risk behaviour associated with drug injecting. As has been seen, a key role for qualitative research is to understand the social meanings and social contexts of injecting drug use and associated risk behaviour in order that appropriate risk-reduction interventions are developed. If the harms associated with drug injecting are to be prevented, the first step towards risk-reduction interventions is to understand how IDUs perceive risk behaviour and risk reduction in the context of their own experiences and lifestyles. It is better for intervention developments to be grounded in experience than in theory alone.

Ethnographic insights

The insights generated by qualitative studies of risk behaviour have immediate relevance for risk reduction. First, the identification and description of specific risk behaviours informs public health risk assessment, planning and targeting. As the contribution of ethnography to defining risk practices such as ‘indirect’ sharing and ‘unsafe protected sex’ has illustrated (Koester, 1996; Quirk et al., 1998), ethnographic description is an important first step in determining the extent and nature of behavioural change necessary for risk reduction to take place. Second, an understanding of the social meanings and social contexts of drug use helps inform the feasibility and relevance of planned or implemented interventions.

The efficacy of intervention developments is dependent on the extent to which they are perceived as appropriate by target populations and the extent to which social and contextual factors impede or facilitate their delivery. An understanding of the ‘risk environment’ in which drug injecting and intervention developments take place is paramount in developing effective public health responses. As Wiebel notes of the role of ethnography in HIV prevention:

‘Ethnography’s role is twofold. First, to document the norms, values and situational factors relating to HIV risk practices among targeted social networks. Second, to document changes in HIV risk practices over time and identify obstacles and facilitators to such change.’ (Wiebel, 1996, p. 190).

Qualitative research thus enables interventions to be developed in cognisance of local needs, norms and practices. Undertaking action-oriented qualitative research supports intervention developments by identifying who best to target, with what type of messages or materials, and how best to deliver them. The work conducted by Power and colleagues (1996) in London provides a brief example. In their study of the coping strategies of IDUs not in contact with helping services, they explored the interplay

between drug-user networks and informal risk-reduction strategies. This led to a detailed description of the ways in which drug users manage risk through peer support networks. In response, the research made a strong case for the design of peer education and social network interventions as a means of encouraging social and community change. The study arrived at five key conclusions for the development of successful risk reduction among IDUs (Power et al., 1996, pp. 151–157):

- interventions should build on the structures of drug-user social networks;
- interventions should encourage positive aspects of informal risk management;
- interventions should discourage behaviours that are prejudicial to risk management;
- drug arenas present opportunities for community-based interventions; and
- roles within the drug market can assist community interventions.

Interventions based on an ethnographic appreciation of drug use and risk behaviours are therefore ‘grounded’ in ways which ensure their practical relevance and acceptability to IDUs themselves (Koester, 1996; Wiebel, 1996). It is, therefore, important to conduct ethnographic and ‘situational’ assessments before the development of new interventions.

This point is reinforced by a brief reference to an intervention designed to prevent initiation into injecting drug use reported by Hunt and colleagues (1998). This intervention was developed on the basis of ethnographic interviews as well as on previous work by others which had identified a resistance among IDUs to initiate non-IDUs into injection (Shelley et al., 1993; Crofts et al., 1996). Based on this knowledge, the intervention capitalised on informal risk-management strategies already existing within IDU networks. The intervention met with acceptance among IDUs. It resulted in a reduction in the number of times IDUs injected in front of non-IDUs, a fall in the number of requests to be initiated, as well as a fall in the number of people initiated (Hunt et al., 1998).

Process evaluation

IDUs' access to, and utilisation of, services has been a central focus of a number of qualitative studies evaluating IDUs' views and experiences of services, as well as the management and day-to-day running of services themselves. The use of qualitative techniques such as observation, in-depth interviews and focus groups has been a key feature of many evaluations of HIV and drug-service delivery. These have included studies of drug rehabilitation and drug substitution treatment (Korf and Hoogenhout, 1990; Rosado and Escursell, 1994; Sickinger, 1994; Quemada Nieto, 1995; Schroers, 1995; Lilly et al., forthcoming), syringe exchange and distribution (Grund et al., 1992b; Kaplan et al., 1992), risk reduction in sex work contexts (Coppel et al., 1993; Rotilly, 1997), and evaluation of outreach and community-based interventions (Boullenger et al., 1991; Rhodes et al., 1991; Grund et al., 1992a; Kaplan et al., 1992; Rhodes and Holland, 1992; De Ruyver et al., 1995; Schroers, 1995).

Taken together, these studies emphasise the role of qualitative methods in understanding the contextual factors influencing intervention feasibility, organisation and performance, client expectations and views, and client-worker interactions. Qualitative methods, and a focus on client and worker perceptions of intervention delivery and efficacy, should be considered essential features of evaluation design.

Action research and rapid assessment

There are clear public health benefits to be realised by explicitly linking research to intervention development and evaluation. This has led to an emphasis on developing qualitative models of action research and intervention models incorporating ethnographic assessment (Coppel et al., 1990; Sterk, 1993; Wiebel, 1996). One incisive example has been the development of models of community outreach which integrate ethnographic description as a key means to intervention design. The Indigenous Leader Outreach Intervention Model developed in Chicago, for example,

uses ethnographic research to identify communication channels within particular networks of IDUs as a means of targeting peer leaders as prevention advocates (Wiebel, 1996). Successful outreach interventions often combine the role of ethnographic field-worker with that of health educator (Sterk, 1993).

There has been increased interest in developing multi-method approaches to 'rapid assessment and response' (Rhodes et al., 1999c; Stimson et al., 1999). Rapid assessment aims to fill the gap which commonly exists between conventional social science research and intervention. Whereas the link between conventional research and response development is often ill-defined, rapid assessment is undertaken specifically in order that locally appropriate responses are developed as rapidly as possible. It is argued that rapid-assessment approaches may be particularly effective in helping to limit the diffusion of epidemic outbreaks, such as HIV transmission associated with injecting (Stimson et al., 1999). Such methods, which borrow from the methodological principles underpinning qualitative methods more generally, are becoming increasingly popular in the drugs field.

RESEARCH DEVELOPMENT

The time of AIDS has brought about renewed interest in the use of qualitative methods, demonstrating that such methods are ideally suited to:

- conducting research among hidden populations 'at risk';
- identifying and interpreting drug use and risk behaviours; and
- developing social interventions in response.

Research in the time of AIDS has highlighted the role of qualitative research in both understanding the social context of drug use and risk behaviours as well as responding with pragmatic recommendations for intervention and policy developments (EMCDDA, 2000a).

Here, we conclude by summarising briefly the implications of the review drawn up by the EMCDDA working group on injecting drug use and risk behaviour for future European qualitative research on drug use.

European qualitative research

Qualitative research is a recent development in many European countries, and qualitative research on drug use, specifically, remains embryonic in most. This is the case in central and east European countries as well as some countries in western Europe. This reflects historical developments in social-science method and disciplinary focus more generally, as well as the relative positioning of social science — and sociology and anthropology, in particular — to psychology, psychiatry and medicine in drugs research.

This leads us to conclude that there is a need for multi-site collaborative projects between European countries, facilitating qualitative analyses of health risks in the context of drug injecting and opportunities for the transference of methodological expertise. The question of the extent to which qualitative forms of data collection and analyses can be comparable across countries would itself provide an appropriate means for assessing the needs and opportunities for transferring qualitative research expertise.

In addition to the encouragement of multi-site research projects, we also conclude that there is a continued need to make accessible the data and findings derived from European qualitative research on drug use. The EMCDDA web site on qualitative research at <http://www.qed.org.uk> is an attempt to do this.

This latest volume in the *Insights* series does not provide an exhaustive review but constitutes a preliminary attempt to clarify the role of qualitative research in researching risk associated with injecting drug use.

Much European qualitative research continues to be reported as 'grey literature'. This is, in part, a reflection of its perceived status

in many countries as a 'secondary' source of data in projects oriented to quantitative data collection, the scarcity of peer-reviewed publication outlets available, the relative lack of institutional infrastructures and resources promoting expertise in qualitative methodology, and, in part, a reflection of language differences (quantitative findings are easier to 'translate' across languages than qualitative findings, which emphasise 'text' and 'nuance' in interpretation). We are aware, for example, that this volume places greater emphasis on English-language and electronic publications and, as a consequence, may misrepresent the range of European qualitative research on drug injecting.

The role of qualitative research

The application of qualitative methods to studies of risk behaviour and risk reduction associated with drug injecting is at once pragmatic and methodological. There is a need to combine a variety of methodological approaches in the study and development of responses to public health problems associated with drug use.

We conclude that research approaches which combine the use of multiple methods with multiple sources of data are likely to increase the reliability, validity and practical efficacy of judgments made.

Qualitative methods are a necessary feature of multi-method approaches to understanding and responding to drug use. Not only does qualitative research complement quantitative research, it may also question the extent to which a priori research definitions of drug use adequately capture the meanings and lived experiences of drug use. As we have highlighted above and throughout, qualitative research has a key role to play in:

- offering methods capable of reaching and researching 'hidden' populations of drug users in their natural settings;
- understanding the experience and meaning of drug use as it is perceived by drug users themselves;

- understanding how different social situations and contexts influence patterns of drug use;
- understanding the interplay of social and environmental factors which influence the experience and context of drug use;
- identifying and describing specific drug-use practices and associated risk behaviours;
- informing the extent and nature of behaviour changes necessary for risk reduction to take place;
- informing the development of appropriate, feasible and effective risk-reduction interventions;
- understanding the interplay of social and environmental factors which influence intervention efficacy; and
- evaluating the process of intervention delivery and organisation and its perceived effectiveness.

Future qualitative research

Following the tradition established in social-interactional research, we conclude that social-interactionist studies of drug-use lifestyles and careers remain important, not only for studies of injecting drug use, but also for studies of new trends in drug use.

Given that qualitative studies are best suited for understanding particular social situations, groups or behaviours, it is difficult for us to generalise as to the precise focus of future European qualitative studies.

A number of topics, however, appear to have been under-investigated — particularly with respect to capturing the interplay between meaning and context — and to have public health relevance across a number of settings. The research topics we identify as being of priority for future European qualitative studies on the health risks associated with drug injecting are summarised in Figure 12.

Lastly, we emphasise the utility of intervention-based, action-oriented and rapid-assessment projects. Noting that qualitative methods are under-utilised in the development of risk-reduction

FIGURE 12: TOPICS FOR FUTURE RESEARCH

- Factors influencing the individual risk management of overdose
- Risk perception, help-seeking and treatment experience associated with hepatitis C
- Risk perception, help-seeking and treatment experience among HIV-positive IDUs
- The influence of gender and power in risk behaviour and risk reduction
- Qualitative evaluation of IDUs' experiences of syringe exchange, outreach and drug treatment
- Development of rapid-assessment models to assist intervention development
- Development of cross-national studies and capacity building

interventions — such as syringe exchange, outreach, peer intervention and substitution treatment — we see great potential for the application of qualitative methods in the development, evaluation and description of interventions targeting IDUs.

Such studies should also be seen as creating opportunities for understanding the social meanings, experience and context of risk behaviour, and risk reduction more generally, including among IDUs who remain 'hidden' from such interventions.

References

Aalto, E. and MacRae, R. (1997), *Risk taking and risk management amongst female injecting drug users and drug injecting couples: a qualitative investigation*, Centre for Drug Misuse Research, University of Glasgow, Glasgow.

Abeni, D., Perucci, C. A., Dolan, K. and Sangali, M. (1998), 'Prison and HIV-1 infection among drug injectors', in G. V. Stimson, D. C. Des Jarlais and A. Ball (eds), *Drug injecting and HIV infection*, Taylor and Francis, London.

Advisory Council on the Misuse of Drugs (ACMD) (1998), *Drug use and the environment*, Home Office, London.

Agar, M. (1973), *Ripping and running: a formal ethnography of urban heroin users*, Academic Press, New York.

Agar, M. (1980), *The professional stranger: an informal introduction to ethnography*, Academic Press, New York.

Agar, M. (1995), 'Recasting the "ethno" in "epidemiology"', *Medical Anthropology*, 16, pp. 1–13.

Agar, M. (1997), 'Ethnography: an overview', *Substance Use and Misuse*, 32, pp. 1155–1173.

Agar, M. (forthcoming), 'Qualitative research and public policy', in T. Rhodes (ed.), *Qualitative methods in drugs and alcohol research*, Sage, London.

Anchuela, O. T., Catalan, J. C. and Díaz, M. F. S. (1994), 'Evolución del patrón epidemiológico del SIDA en España', *Publicación Oficial de la Sociedade Española Interdisciplinaria de SIDA*, 5, pp. 80–81.

Anderson, N. (1923), *The hobo*, University of Chicago Press, Chicago.

Arlacchi, P. and Lewis, R. (1990a), *Impreditorialità illecita e droga: il mercato dell'eroina a Verona*, Il Mulino, Bologna.

Arlacchi, P. and Lewis, R. (1990b), 'Droga e criminalità a Bologna', *Mir-omega*, 4, pp. 183–221.

Ball, A., Rana, S. and Dehne, K. L. (1998), 'HIV prevention among injecting drug users: responses in developing and transitional countries', *Public Health Reports*, 113(Suppl. 1), pp. 170–181.

Barnard, M. A. (1993a), 'Needle sharing in context', *Addiction*, 88, pp. 805–812.

Barnard, M. A. (1993b), 'Violence and vulnerability: conditions of work for streetworking prostitutes', *Sociology of Health and Illness*, 15, pp. 683–705.

Barnard, M. and Frischer, M. (1995), 'Combining quantitative and qualitative approaches: researching HIV-related risk behaviours among drug injectors', *Addiction Research*, 2, pp. 351–362.

Battjes, R. J., Pickens, R. W., Haverkos, H. W. and Sloboda, Z. (1994), 'HIV risk factors among injecting drug users in five US cities', *AIDS*, 8, pp. 681–687.

Becker, H. (1953), 'Becoming a marijuana user', *American Journal of Sociology*, 59, pp. 235–242.

Becker, H. (1963), *Outsiders: studies in the sociology of deviance*, Free Press, London.

Becker, H. (1970), 'History, culture and subjective experience: an exploration of the social bases of drug-induced experiences', in H. Becker (ed.), *Sociological work*, Aldine, Chicago.

Biernacki, P. and Waldorf, D. (1981), 'Snowball sampling: problems and techniques of chain referral sampling', *Sociological Methods and Research*, 10, pp. 141–163.

Blanken, P., Barebdregt, C., Vollemans, L. and Hendriks, V. M. (1996), *Druggebruikers in Feijenoord: een onderzoek naar hun situatie en behoeften met betrekking tot het kopen en gebruiken van drugs, huisvesting, inkomsten en tijdsbesteding*, Addiction Research Institute, Erasmus University, Rotterdam.

Bless, R., Korf, D. J. and Freeman, M. (1995), 'Open drug scenes: a cross-national comparison of concepts and urban strategies', *European Addiction Research*, 1, pp. 128–138.

Bloor, M. (1995), *The sociology of HIV transmission*, Sage, London.

Bloor, M. (1997), 'Addressing social problems through qualitative research', in D. Silverman (ed.), *Qualitative research: theory, method and practice*, Sage, London.

Bouhnik, P. and Touzé, S. (1997), 'Ville, toxicomanie et prison: les usagers de drogues dures en prison face à la gestion de leur santé', *Prévenir*, 2, pp. 115–126.

Boullenger, N., Rosset, A., Bartet, M. et al. (1991), *Prévention du sida auprès de la toxicomanie hors institution: une approche ethnographique en réseau*, ARCADE, Recherche subventionnée par le Ministère des affaires sociales.

Boulton, M. (ed.) (1994), *Challenge and innovation: methodological advances in social research on HIV/AIDS*, Taylor and Francis, London.

Bourgois, P. (1995), *In search of respect: selling crack in El Barrio*, Cambridge University Press, Cambridge.

Bourgois, P. (1997), 'Social misery and the sanctions of substance abuse: confronting HIV risk among homeless heroin addicts in San Francisco', *Social Problems*, 44, pp. 155–173.

Broers, B., Junet, C., Bourguin, M., Deglon, J. J., Perrin, L. and Hirschel, B. (1998), 'Prevalence and incidence rate of HIV, hepatitis B and C among drug users on methadone maintenance treatment in Geneva between 1998 and 1995', *AIDS*, 12, pp. 2059–2066.

Brooks, C. (1994), 'Using ethnography in the evaluation of drug prevention and intervention programmes', *International Journal of the Addictions*, 29, pp. 791–801.

Burrows, D., Rhodes, T., Trautmann, F., Bijl, M., Stimson, G. V., Sarankov, Y., Ball, A. and Fitch, C. (1998), 'Responding to HIV associated with drug injecting in eastern Europe', *Drug and Alcohol Review*, 17, pp. 453–463.

Carey, J. (1975), *Sociology and public affairs: the Chicago School*, Sage, London.

Carlson, R. G., Siegal, H. A. and Flack, R. S. (1995), 'Qualitative research methods in drug abuse and AIDS prevention research: an overview', in E. Y. Lambert, R. S. Ashery and R. H. Needle (eds), *Qualitative methods in drug abuse and HIV research*, NIDA Research Monograph 157, Rockville, MD.

Carlson, R., Wang, J., Siegal, H., Flack, R. and Guo, J. (1994), 'An ethnographic approach to targeted sampling: problems and solutions in AIDS prevention research among injection drug and crack-cocaine users', *Human Organisation*, 53, pp. 279–286.

Carlson, R., Wang, J. Siegal, H. et al. (forthcoming), 'Ethnography and targeted sampling', in T. Rhodes (ed.), *Qualitative methods in drugs and alcohol research*, Sage, London.

Carricaburu, D. and Pierret, J. (1992), *Vie quotidienne et recompositions identitaires autour de la seropositivité*, Paris: CERMES-ANRS.

Carricaburu, D. and Pierret, J. (1995), 'From biographical disruption to biographical reinforcement: the case of HIV-positive men', *Sociology of Health and Illness*, 17, pp. 65–88.

Centre for Information and Education on Drugs and Alcohol (1997), *Report of the pilot heroin overdose peer education project*, CEIDA, New South Wales.

Cohen, P. (1989), *Cocaine use in Amsterdam in non-deviant subcultures*, Instituut voor Sociale Geografie, Universiteit van Amsterdam, Amsterdam.

Coppel, A. (1989), *Femme et sida: approche médico-sociale de la population féminine confrontée à l'infection au VIH*, étude réalisée à la demande du Secrétariat d'État chargé du droit des femmes.

Coppel, A., Boullenger, N. and Bouhnik, P. (1993), *Les réseaux d'échange sexuels et de circulation de l'information en matière de sexualité chez les jeunes des quartiers à risque*, Agence nationale de recherche sur le sida, Paris.

Coppel, A., Braggiotti, L., De Vincenzi, I., Besson, S., Ancelle, R-M. and Brunet, J-B. (1990), *Recherche-action: prostitution et santé*

publique, Agence française de lutte contre le sida et Direction générale de la santé.

Coppel, A. and Touzeau, D. (1988), *Recherche-action: la toxicomanie dans la ville d'Orly*, Comité départemental de la Croix-Rouge et Sous-direction de l'action sanitaire et sociale de la Croix-Rouge.

Costa, A. (1994), 'O VIH no centro Taipas', *Centro das Taipas: Colectanea de Textos*, 6, pp. 124–125.

Costa, A. (1997), 'Algumas reflexões sobre a evolução da infecção pelo VIH entre os utentes do CAT das Taipas', *Centro das Taipas: Colectanea de Textos*, 9, pp. 83–87.

Council of Europe Pompidou Group (1997), *The handbook on snowball sampling*, Council of Europe, Strasbourg.

Crofts, N., Jolley, D., Kaldor, J., van Beek, I. and Wodak, A. (1997), 'Epidemiology of hepatitis C infection among injecting drug users in Australia', *Journal of Epidemiology and Community Health*, 51, pp. 692–697.

Crofts, N., Louie, R., Rosenthal, D. and Jolley, D. (1996), 'The first hit: circumstances surrounding initiation into injecting', *Addiction*, 91, pp. 1187–1196.

Crofts, N., Reid, G. and Deany, P. (1998), 'Injecting drug use and HIV infection in Asia', *AIDS*, 12(Suppl. B), pp. S69–S78.

Cusick, L. (1998), 'Non-use of condoms by prostitute women', *AIDS Care*, 10, pp. 133–146.

Cusick, L. and Rhodes, T. (1999), 'The process of disclosing positive HIV status: findings from qualitative research', *Culture, Health and Sexuality*, 1, pp. 3–18.

Dai, B. (1937), *Opium addiction in Chicago*, Patterson Smith, Montclair, NJ.

Darke, S. and Hall, W. (1997), 'The distribution of naloxone to heroin users', *Addiction*, 92, pp. 1195–1199.

Darke, S., Ross, J. and Hall, W. (1996a), 'Overdose among heroin users in Sydney, Australia: prevalence and correlates of non-fatal overdose', *Addiction*, 91, pp. 405–411.

Darke, S., Ross, J. and Hall, W. (1996b), 'Overdose among heroin users in Sydney, Australia: responses to overdose', *Addiction*, 91, pp. 413–417.

Davidson, P. and Moore, S. (1999), 'After the sirens: an overview of the opioid overdose prevention strategy Emergency Department Follow-up Project', paper presented at Tenth International Conference on the Reduction of Drug-Related Harm, Geneva.

Davies, P., Dominy, N., Peters, A. et al. (1995), 'HIV in injecting drug users in Edinburgh: prevalence and correlates', *Journal of Acquired Immune Deficiency Syndromes*, 8, pp. 399–405.

Davoli, M., Perucci, C. A., Areni, D. D. C. et al. (1995), 'HIV risk-related behaviours among injection drug users in Rome: differences between 1990 and 1992', *American Journal of Public Health*, 85, pp. 829–832.

Davoli, M., Perucci, C. A., Forastière, F. et al. (1993), 'Risk factors for overdose mortality: a case-control study within a cohort of intravenous drug users', *International Journal of Epidemiology*, 22, pp. 273–277.

Davoli, M., Perucci, C. A., Rapiti, E. et al. (1997), 'A persistent rise in mortality among injection drug users in Rome, 1980 through 1992', *American Journal of Public Health*, 87, pp. 851–853.

Day, S. (1990), 'Prostitute women and the ideology of work, in London', in D. Feldman (ed.), *Culture and AIDS*, Praeger, London.

Dehne, K. L., Khodakevich, L., Hamers, F. F. and Schwartlander, B. (1999), 'The HIV/AIDS epidemic in eastern Europe: recent patterns and trends and their implication for policy-making', *AIDS*, 13, 741–749.

de la Fuente, L., Barrio, G., Vicente, J. et al. (1994), 'Intravenous administration among heroin users having treatment in Spain', *International Journal of Epidemiology*, 23, pp. 805–811.

Delor, F. (1997), *Séropositifs: trajectoires identitaires et rencontres du risque*, Logiques sociales, L'Harmattan.

Denzin, N. (1970), *The research act*, Aldine, Chicago.

Denzin, N. and Lincoln, Y. (eds) (1994), *Handbook of qualitative research*, Sage, London.

De Quincey, T. (1822), *Confessions of an English opium eater*, Taylor and Hessey, London.

De Ruyver, B., Soenens, A., van Daele, L. and Vanderbeken, T. (1995), *Straathoek werk in Vlaanderen*, King Baudouin Foundation, Gent.

Des Jarlais, D. C., Perlis, T., Friedman, S. R. et al. (1998), 'Declining seroprevalence in a very large HIV epidemic: injecting drug users in New York City, 1991–1996', *American Journal of Public Health*, 88, pp. 1801–1806.

Diaz, A., Barruti, M. and Doncel, C. (1992), *The lines of success? A study on the nature and extent of cocaine use in Barcelona*, Laboratori de Sociologia, Barcelona.

Donoghoe, M. C. and Wodak, A. (1998), 'Health and social consequences of injecting drug use', in G. V. Stimson, D. C. Des Jarlais and A. Ball (eds), *Drug injecting and HIV infection*, Taylor and Francis, London.

Drucker, E., Lurie, P., Wodak, A. and Alcabes, P. (1998), 'Measuring harm reduction: the effects of needle and syringe exchange programmes and methadone maintenance on the ecology of HIV', *AIDS*, 12(Suppl. A), pp. S217–S230.

Ege, P. (1989), 'HIV smitte og risikoadfærd hos stofmisbrugere I en københavnsk behandlingsinstitution in Copenhagen', *Ugeskrift for Læger*, 151, pp. 616–619.

Engels, F. (1969), *The condition of the working class in England* (first ed. 1844), Granada, London.

English, D. R., Holman, C., Milne, E. et al. (1995), *The quantification of drug caused morbidity and mortality in Australia*, Commonwealth Department of Human Services and Health, Canberra.

European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (1999a), *Annual report on the state of the drugs problem in the European Union — 1999*, EMCDDA, Lisbon.

European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (1999b), *Review of scientific studies of mortality among drug users and feasibility study for a common methodology for monitoring overall and cause-specific mortality among drug users in the Member States of the European Union*, EMCDDA/OERL, Lisbon.

European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2000a), *Understanding and responding to drug use: the role of qualitative research*, EMCDDA, Lisbon.

European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2000b), *2000 Annual report on the state of the drugs problem in the European Union*, EMCDDA, Lisbon.

Faugier, J., Hayes, C. and Butterworth, C. (1992), *Drug using prostitutes: their health care needs and their clients*, University of Manchester Press, Manchester.

Feldman, H. W. (1973), 'Street status and drug users', *Society*, 10, pp. 32–39.

Feldman, H. W., Agar, M. and Beschner, G. M. (eds) (1979), *Angel dust: an ethnographic study of PCP users*, Heath/Lexington Books, Lexington, MA.

Feldman, H. and Aldrich, M. (1990), 'The role of ethnography in substance abuse research and public policy', in E. Lambert (ed.), *The collection and interpretation of data from hidden populations*, National Institute on Drug Abuse Monograph 98, Rockville.

Fernandes, L. (1995), 'O sítio das drogas: etnografia urbana dos territórios psicotrópicos', *Toxicodependências*, 1, pp. 22–32.

Fielding, N. (1993), 'Ethnography', in N. Gilbert (ed.), *Researching social life*, Sage, London.

Finestone, H. (1957), 'Cats, kicks and colour', *Social Problems*, 5, pp. 3–13.

Fountain, J. and Griffiths, P. (1998), *An inventory, bibliography and synthesis of qualitative research on drug use in the European Union*, EMCDDA, Lisbon.

Fraser, A. and George, M. (1988), 'Changing trends in drug use: an initial follow-up of a local heroin community', *British Journal of Addiction*, 83, pp. 655–663.

Freeman, R. C., Rodriguez, G. M. and French, J. F. (1994), 'A comparison of male and female intravenous drug users' risk behaviours for HIV infection', *American Journal of Drug and Alcohol Abuse*, 20, pp. 129–157.

Friedman, S. R., Des Jarlais, D. C., Ward, T. et al. (1994), 'Drug injectors and heterosexual AIDS', in L. Sherr (ed.), *Heterosexual AIDS*, Harwood, London.

Friedman, S. R., Neaigus, A., Jose, B. et al. (1997), 'Sociometric risk networks and HIV risk', *American Journal of Public Health*, 87, pp. 1289–1296.

Friedman, S. R., Jose, B., Neaigus, A., Goldstein, M., Mota, P., Curtis, R. and Ildelfonso, G. (1998), 'Multiple racial/ethnic subordination and HIV among drug injectors', in M. Singer (ed.), *The political economy of AIDS* (pp. 105–127), Baywood Press, Amityville, NY.

Frischer, M., Goldberg, D., Rahman, M. and Berney, L. (1997), 'Mortality and survival among a cohort of drug injectors in Glasgow, 1982–1994', *Addiction*, 92, pp. 419–427.

Frischer, M., Green, S. T., Goldberg, D. J. et al. (1992), 'Estimates of HIV infection among injecting drug users in Glasgow, 1985–1990', *AIDS*, 6, pp. 1371–1375.

Galeazzi, B., Tufano, A., Barbierato, E. and Bortolotti, F. (1995), 'Hepatitis C virus infection in Italian intravenous drug users: epidemiological and clinical aspects', *Liver*, 15, pp. 209–212.

Gamella, J. F. (1991), 'Droga: la logica de lo endovenoso', *Claves de la Razón Práctica*, 18, pp. 72–80.

Gamella, J. F. (1993), 'Los heroinómanos de un barrio de Madrid: un estudio cuantitativo mediante métodos etnográficos', *Antropología*, 4–5, pp. 57–101.

Gamella, J. F. (1994), 'The spread of IV drug use and AIDS in a neighbourhood in Spain', *Medical Anthropology Quarterly*, 8, pp. 131–160.

Gamella, J. F. (1997a), 'Heroína en España, 1977–96: balance de una crisis de drogas', *Claves de la Razón Práctica*, 72, pp. 20–30.

Gamella, J. F. (1997b), *La historia de Julián: memorias de heroína y delincuencia*, Editorial Popular, Madrid.

Gamella, J. F. (1997c), 'Las rutinas del yonqui activo: un modelo cognitivo', *Jornadas sobre Programas de Intercambio de Jeringuillas*, Ministerio de Sanidad y Consumo.

Ghodse, H., Oyefeso, A. and Kilpatrick B. (1998), 'Mortality of drug addicts in the United Kingdom, 1967–1993', *International Journal of Epidemiology*, 27, pp. 473–478.

Glaser, B. and Strauss, A. (1967), *The discovery of grounded theory*, Aldine, Chicago.

Godinho, J., Costa, H. and Costa, C. (1996), 'Comportamentos de risco de doenças infecciosas', *Toxicodependências*, 2, pp. 56–60.

Goffman, E. (1961), *Encounters: two studies in the sociology of interaction*, Bobbs-Merrill, Indianapolis.

Goldberg, D., Cameron, S. and McMenamin, J. (1998), 'Hepatitis C virus antibody prevalence among injecting drug users in Glasgow has fallen but remains high', *Communicable Disease and Public Health*, 1, pp. 95–97.

Grieten, C. (1994), *HIV-preventie bij injecterende druggebruikers: ethnographisch onderzoek injecterende druggebruikers Antwerpen*, VAD-KUL Free Clinic, Antwerpen.

Griffiths, P., Gossop, M., Powis, B. and Strang, J. (1993), 'Reaching hidden populations of drug users by privileged access interviewers', *Addiction*, 88, pp. 1617–1626.

Grund, J-P. C. (1993), *Drug use as a social ritual: functionality, symbolism and determinants of self-regulation*, Instituut voor Verslavingsonderzoek, Rotterdam.

Grund, J-P. C., Blanken, P., Adriaans, N. F. P. et al. (1992b), 'Reaching the unreached: targeting hidden IDU populations with clean needles via known users', *Journal of Psychoactive Drugs*, 24, pp. 41–47.

Grund, J-P. C., Friedman, S. R., Stern, L. S., Jose, B., Neaigus, A. et al. (1996), 'Syringe-mediated drug sharing among injecting drug users: patterns, social context and implications for transmission of blood-borne pathogens', *Social Science and Medicine*, 42, pp. 691–703.

Grund, J-P. C., Kaplan, C., Adriaans, N. F. P. et al. (1990), 'The limitations of the concept of needle sharing: the practice of "frontloading"', *AIDS*, 4, pp. 702–703.

Grund, J-P. C., Kaplan, C., Adriaans, N. F. P. and Blanken, P. (1991), 'Drug sharing and HIV transmission risks: the practice of "frontloading" in the Dutch injecting drug user population', *Journal of Psychoactive Drugs*, 23, pp. 1–10.

Grund, J-P. C., Kaplan, C. D. and de Vries, M. (1993), 'Rituals of regulation: controlled and uncontrolled drug use in natural settings', in N. Heather, A. Wodak, E. Nadelman and P. O'Hare (eds), *Psychoactive drugs and harm reduction*, Whurr Publishers, London.

Grund, J-P. C., Stern, L. S., Kaplan, C. D., Adriaans, N. F. P. and Drucker, E. (1992a), 'Drug use contexts and HIV consequences: the effect of drug policy on patterns of everyday drug use in Rotterdam and the Bronx', *British Journal of Addiction*, 87, pp. 381–392.

Hakkarainen, P. (1989), 'A cultural perspective on drug use', in R. Waahlberg (ed.), *Prevention and control: proceedings of the 25th International Conference on Alcohol and Drug Dependence*, Norway National Directorate for the Prevention of Alcohol and Drug Problems, Oslo.

Hammersley, M. (1992), *What's wrong with ethnography?* Routledge, London.

Hamouda, O., Schwartlander, B., Kock, M. A. et al. (1993), 'AIDS/HIV 1992: Bericht zur epidemiologischen situation in der Bundesrepublik Deutschland zum 31.12.92', AIDS-Zentrum in Bundesgesundheitsamt, AZ Hefte, Berlin.

Hanson, B., Brechner, G., Walters, J. and Bovelie, R. (1985), *Life with heroin: voices from the inner city*, Lexington Books, Lexington, MA.

Hariga, F. (1999), Personal communication.

Hartnoll, R. (1995), 'A difficult business', *Addiction*, 90, pp. 762–763.

Hartnoll, R. and Power, R. (1989), *A study of help-seeking and service utilisation*, Institute for the Study of Drug Dependence, London.

Heath, D. (1995), 'Quantitative and qualitative research on alcohol and drugs: a helpful reminder', *Addiction*, 90, pp. 753–755.

Heckmann, W., Puschel, K., Schmoltdt, A. et al. (eds) (1993), *Drogennot und Todesfälle: eine differentielle Untersuchung der Prävalenz und Ätiologie der Drogenmortalität*, Nomos Verl-Ges, Baden-Baden.

Hedburg, J. C. and Gaub, J. (1995), 'Hepatitis epidemic among drug addicts in Esbjerg from July 1993 to May 1994', *Ugeskrift for Laeger*, 157, pp. 5701–5703.

Henderson, S. (1996), "'E types and dance divas": gender research and community prevention', in T. Rhodes and R. Hartnoll (eds), *AIDS, drugs and prevention: perspectives on individual and community action*, Routledge, London.

Hendriks, V. M., Blanken, P., Adriaans, N. F. P. et al. (1992), *Snowball sampling: a pilot study on cocaine use*, Addiction Research Institute, Erasmus University, Rotterdam.

Herd, G. and Lindenbaum, S. (eds) (1992), *The time of AIDS: social analysis, theory and method*, Sage, London.

Hickey, A. et al. (1994), 'No (safe) sex please, we're Irish: sexual functioning and use of safer sexual practices in an Irish HIV-positive cohort', *Irish Journal of Psychology*, 12, pp. 404–417.

Hickman, M., Judd, A., Stimson, G. V., Hunter, G. M., Jones, S. and Parry, J. (1999), 'Prevalence of HIV, hepatitis B virus (HBV) and hepatitis

C virus (HCV) among injecting drug users in England, 1997–98’, paper presented at Tenth International Conference on the Reduction of Drug Related Harm, Geneva.

Holland, J., Ramazanogly, C., Scott, S., Sharpe, S. and Thomson, R. (1991), ‘Sex, gender and power: young women’s sexuality in the shadow of AIDS’, *Sociology of Health and Illness*, 12, pp. 336–350.

Howard, J. and Borges, P. (1970), ‘Needle sharing in the Haight: some social and psychological functions’, *Journal of Health and Social Behaviour*, 11, pp. 220–230.

Hughes, H. (1961), *The fantastic lodge: the autobiography of a drug addict*, Fawcett World Library, New York.

Hughes, P. (1977), *Behind the wall of respect: community experiments in heroin addiction control*, University of Chicago Press, Chicago.

Hulse, G., English, D. R., Milne, E. and Holman, D. J. (1999), The quantification of mortality resulting from the regular use of illicit opiates, *Addiction*, 94, pp. 221–229.

Hunt, N., Stillwell, G., Taylor, C. and Griffiths, P. (1998), ‘Evaluation of a brief intervention to prevent initiation into injecting’, *Drugs: Education, Prevention and Policy*, 5, pp. 185–194.

Hunter, G. M., Donoghoe, M. C., Stimson, G. V. et al. (1995), ‘Changes in the injecting risk behaviour of injecting drug users in London, 1990–93’, *AIDS*, 9, pp. 493–501.

Hurley, S. F., Jolley, D. J. and Kaldor, J. M. (1997), ‘Effectiveness of needle-exchange programmes for prevention of HIV infection’, *Lancet*, 349, pp. 1797–1800.

Ingold, F. R. (1996), *La transmission du VIH chez les toxicomanes*, IREP, Paris.

Ingold, F. R. and Toussirt, M. (1997), *Étude multi-centrique sur les attitudes et les comportements des toxicomanes face au risque de contamination par le VIH et les virus de l’hépatites*, IREP, Paris.

Jackson, B. (1978), 'Deviance as success: the double inversion of stigmatised roles', in B. A. Babcock (ed.), *The reversible world*, Cornell University Press, Ithaca.

James, J. (1977), 'Ethnography and social problems', in R. Weppner (ed.), *Street ethnography*, Sage, Beverly Hills, CA.

Jamieson, A., Glanz, A. and MacGregor, S. (1984), *Dealing with drug misuse: crisis intervention in the city*, Tavistock, London.

Joe, G. and Simpson, D. (1987), 'Mortality rates among opioid addicts in a longitudinal study', *American Journal of Public Health*, 77, pp. 347–348.

Johnson, B., Goldstein, P., Preble, R. et al. (1985), *Taking care of business: the economics of crime by heroin abusers*, Lexington Books, Lexington, MA.

Johnson, Z. et al. (1994), 'Prevalence of HIV and associated risk behaviour in attendees at a Dublin needle exchange', *Addiction*, 89, pp. 603–607.

Jose, B., Friedman, S. R., Neaigus, A. et al. (1993), 'Syringe-mediated drug-sharing (back-loading): a new risk factor for HIV among injecting drug users', *AIDS*, 7, pp. 1653–1660.

Judd, A., Hickman, M., Renton, A. and Stimson, G. V. (1999b), 'Hepatitis C infection among injecting drug users: has harm reduction worked?' *Addiction Research*, 7, pp. 1–6.

Judd, A., Hunter, G. M., Stimson, G. V., Hickman, M. and Jones, S. (1999a), 'HIV prevalence and risk behaviour among female injecting drug users in London, 1990–96', *AIDS*, 13, pp. 833–837.

Kane, S. (1991), 'HIV, heroin and heterosexual relations', *Social Science and Medicine*, 32, pp. 1037–1050.

Kaplan, C. D. et al. (1992), 'The "Boule de neige" project: lowering the threshold for AIDS prevention among injecting drug users', *International Journal of Drug Policy*, 3, pp. 170–175.

Kaplan, C. D., de Vries, M. W., Grund, J-P. C. and Adriaans, N. F. P. (1990), 'Protective factors: Dutch intervention, health determinants and the reorganisation of addict life', in H. Ghodse, C. D. Kaplan and R. D. Mann (eds), *Drug misuse and dependence*, Pantheon, London.

Kaplan, C. D., Korf, D. and Sterk, C. (1987), 'Temporal and social contexts of heroin-using populations: an illustration of the snowball sampling technique', *Journal of Nervous and Mental Disease*, pp. 566–575.

Keene, J. and Raynor, P. (1993), 'Addiction as a "soul sickness": the influence of client and therapist beliefs', *Addiction Research*, 1, pp. 77–87.

Kemmesies, U. E. (1995), *Kompulsive Drogengebraucher in den Niederlanden und Deutschland: die offene Drogenszene in Amsterdam und Frankfurt*, Verlag für Wissenschaft und Bildung, Berlin.

Klee, H. (1993), 'HIV risks for women drug injectors: heroin and amphetamine users compared', *Addiction*, 88, pp. 1055–1062.

Klee, H. (1996), 'Amphetamine injecting women and their primary partners: analysis of risk behaviour', in J. Catalan, L. Sherr and B. Hedge (eds), *The impact of AIDS*, Harwood Academic Publishers, Netherlands.

Knipe, E. (1995), *Culture, society and drugs*, Waveland Press, Prospect Heights, IL.

Koester, S. (1994), 'Copping, running and paraphernalia laws: contextual variables and needle risk behaviour among injection drug users in Denver', *Human Organisation*, 53, pp. 287–295.

Koester, S. (1996), 'The process of drug injection: applying ethnography to the study of HIV risk among IDUs', in T. Rhodes and R. Hartnoll (eds), *AIDS, drugs and prevention*, Routledge, London.

Koester, S., Booth, R. and Wiebel, W. (1990), 'The risk of HIV transmission from sharing water, drug mixing containers and cotton filters among intravenous drug users', *International Journal on Drug Policy*, 1, pp. 28–30.

Koester, S. and Hoffer, L. (1994), '"Indirect Sharing": additional HIV risks associated with drug injection', *AIDS and Public Policy*, 2, pp. 100–104.

Kokkevi, A., Alevizou, S., Arvanikis, Y. et al. (1992), 'AIDS related behaviour and attitudes among IV drug users in Greece', *International Journal of Addictions*, 27, pp. 37–50.

Korf, D. J. and Hoogenhout, H. P. H. (1990), *Zoden aan de dijk: heroïnegebruikers en hun ervaringen met en waardering van de Amsterdamse drughulpverlening*, Instituut voor Sociale Geografie, Universiteit van Amsterdam, Amsterdam.

Krook, A., Albert, J., Andersson, S. et al. (1997), 'Prevalence and risk factors for HTLV-11 infection in 913 injecting drug users in Stockholm', *Journal of Immune Deficiency Syndromes*, 15, pp. 381–386.

Lambert, E. Y. (ed.) (1990), *The collection and interpretation of data from hidden populations*, National Institute on Drug Abuse Monograph 98, Washington, DC.

Lambert, E. Y., Ashery, R. S. and Needle, R. H. (eds) (1995), *Qualitative methods in drug abuse and HIV research*, National Institute on Drug Abuse Monograph 157, Rockville, MD.

Lamden, K. H., Kennedy, N., Beeching, N. J., Lowe, D., Morrison, C. L., Mallinson, H. et al. (1998), 'Hepatitis B and C virus infections: risk factors among drug users in the north west of England', *Journal of Infection*, 37, pp. 260–269.

Latkin, C., Mandell, W. D., Vlahov, D. et al. (1994), 'My place, your place and no place: behaviour settings as a risk factor for HIV-related injection practices of drug users in Baltimore, Maryland', *American Journal of Community Psychology*, 22, pp. 415–431.

Layder, D. (1993), *New strategies in social research*, Polity Press, Cambridge.

Leinikki, P., Lillsunde, P., Kantanen, M-L. et al. (1996), 'Huumeiden kayttoon liittyyvat virustartunnat (virusmitta I anslutning till narkotikabruk)', *Duodecim*, 112, 2, pp. 150–155.

Lert, F. and Lert, H. (1998), *La stratégie de réduction des risques en actes*, INSERM, Paris.

Lilly, R., Quirk, A., Rhodes, T. and Stimson, G. V. (forthcoming), 'Sociality in methadone treatment: understanding methadone treatment and service delivery as a social process', *Addiction Research*.

Lindesmith, A. (1947), *Opiate addiction*, Principia Press, Bloomington, IN.

Lindesmith, A. (1968), *Addiction and opiates*, Aldine, Chicago.

Lindesmith, A., Strauss, A. and Denzin, N. (1975), *Social psychology*, Dryden Press, Hinsdale, IL.

Ljunberg, B., Christensson, B., Tunving, K. et al. (1991), 'HIV prevention among injecting drug users: three years of experience from a syringe exchange programme in Sweden', *Journal of Acquired Immune Deficiency Syndromes*, 4, pp. 890–895.

Loxley, W. and Davidson, P. (1999), *Forgetting to breathe: opioid overdose and young injecting drug users in Perth*, National Centre for Research into the Prevention of Drug Abuse, Perth.

Lurie, P. and Drucker, E. (1997), 'An opportunity lost: HIV infections associated with lack of a national needle-exchange programme in the USA', *Lancet*, 349, pp. 604–608.

McKeganey, N. (1988), 'Drug abuse in the community', in S. J. Cunningham-Burley and N. McKeganey (ed.), *Readings in medical sociology*, Routledge, London.

McKeganey, N. (1990), 'Being positive: drug injectors' experiences of HIV infection', *British Journal of Addiction*, 85, pp. 1113–1124.

McKeganey, N. (1994), 'Why do men buy sex and what are their assessments of the HIV-related risks when they do', *AIDS Care*, 6, pp. 289–301.

McKeganey, N. (1995), 'Quantitative and qualitative research in the addictions: an unhelpful divide', *Addiction*, 90, pp. 749–751.

McKeganey, N. and Barnard, M. (1992a), *AIDS, drugs and sexual risk: lives in the balance*, Open University Press, Buckingham.

McKeganey, N. and Barnard, M. (1992b), 'Selling sex: female street prostitution and HIV risk behaviour in Glasgow', *AIDS Care*, 4, pp. 395–407.

McKeganey, N. and Barnard, M. (1996), *Sex work on the streets: prostitutes and their clients*, Open University Press, Buckingham.

Magliona, B. and Sarzotti, C. (eds) (1996), *La prigioniera malata: lettura in tema di AIDS, carcere, salute*, L'Harmattan, Turin.

Makower, R. M., Pennycook, A. G. and Moulton, C. (1992), 'Intravenous drug abusers attending an inner city accident and emergency department', *Archives of Emergency Medicine*, 9, pp. 32–39.

Malliori, M., Zunzunegui, M. V., Rodriguez-Arenas, A. and Goldberg, D. (1998), 'Drug injecting and HIV-1 infection: major findings from the multi-city study', in G. V. Stimson, D. C. Des Jarlais and A. Ball, (eds), *Drug injecting and HIV infection*, Taylor and Francis, London.

Mata, A. G. and Jorquez, J. S. (1991), 'Mexican-American intravenous drug users needle sharing practices: implications for AIDS prevention', in R. Battjes and R. Pickins (eds), *Needle sharing among intravenous drug abusers, National and international perspectives*, National Institute on Drug Abuse, Rockville.

Mezzelani, P., Des Jarlais, D. C., Friedman, S. R. et al. (1998), 'A multi-centre study on the causes of death among Italian injecting drug users: AIDS has overtaken overdose as the principal cause of death', *AIDS Care*, 10, pp. 61–67.

Moore, D. (1993), 'Ethnography and illicit drug use: dispatches from an anthropologist in the field', *Addiction Research*, 1, pp. 11–15.

Murphy, S. (1987), 'Intravenous drug use and AIDS: notes on the social economy of needle sharing', *Contemporary Drug Problems*, 14, pp. 373–395.

Nalpas, B., Delarocques-Astagneau, E. et al. (1996), *European survey on hepatitis C: report to the European Commission*, European Commission DGV, Paris.

Neale, J. and McKeganey, N. (1997), *Overdose amongst drug users: a review of the literature*, Chief Scientist Office, Scottish Department of Health, Scotland.

Nicolosi, A., Leite, M. and Molinari, S. (1992), 'Incidence and prevalence trends of HIV infection in intravenous drug users attending centres in Milan and northern Italy, 1986–90', *Journal of AIDS*, 5, pp. 365–373.

Noller, P. (1989), *Junkie-Maschinen: Rebellion und Knechtschaft im Alltag von Heroinabhängigen*, Deutscher Universitäts Verlag, Wiesbaden.

Noller, P. and Reinicke, H. (1987), *Heroinzene: Selbst- und Fremddefinitionen einer Subkultur*, Campus Verlag, Frankfurt am Main.

O'Gorman, A. (1998), 'Illicit drug use in Ireland: an overview of the problem and policy responses', *Journal of Drug Issues*, 28, pp. 155–166.

Oppenheimer, G. M. (1992), 'In the eye of the storm: the epidemiological construction of AIDS', in E. Fee and D. M. Fox (eds), *AIDS: the burdens of history*, University of California Press, London.

Oppenheimer, E., Tobutt, C., Taylor, C. and Andrew, T. (1994), 'Death and survival in a cohort of heroin addicts from London clinics: a 22-year follow-up study', *Addiction*, 89, pp. 1299–1308.

Orti, R. M., Domingo-Salvany, A., Muñoz, A. et al. (1996), 'Mortality trends in a cohort of opiate addicts, Catalonia, Spain', *International Journal of Epidemiology*, 25, pp. 545–553.

Ouellet, L., Jimenez, A., Wendell, J. and Wiebel, W. (1991), 'Shooting galleries and HIV disease: variations in places for injecting illicit drugs', *Crime and Delinquency*, 37, pp. 64–85.

Pallares, J. (1996), *El placer del escorpión: antropología de la heroína y los yonquis*, Milenio, Barcelona.

Pant, A. and Kleiber, D. (1993), 'Explaining decline and stabilisation of HIV seroprevalence in Berlin between 1989 and 1993', paper presented at the Ninth International Conference on AIDS, Berlin (WS-C09-5).

Papaevangelou, G., Roumeliotou, A., Stergiou, G. et al. (1991), 'HIV infection in Greek intravenous drug users', *European Journal of Epidemiology*, 7, pp. 88–90.

Pearce, N. (1996), 'Traditional epidemiology, modern epidemiology and public health', *American Journal of Public Health*, 86, pp. 678–683.

Pearson, G. (1987), *The new heroin users*, Blackwell, London.

Pearson, G. (1995), 'The quantitative–qualitative dispute: an unhelpful divide, but one to be lived with', *Addiction*, 90, pp. 759–761.

Peeters, R. (1990), 'Resultaten HIV enquête 1988–89', unpublished report.

Poikolainen, K. (1997), 'Huumeet suomessa: esiintyvyys ja kehityssuunta (Narkotika I Finland. Forekomst och utvecklingstrend)', *Tiimi*, 32, 2, pp. 4–11.

Power, R. (1989), 'Participant observation and its place in the study of illicit drug use', *British Journal of Addiction*, 84, pp. 43–52.

Power, R. (1995), 'A model of qualitative action research amongst illicit drug users', *Addiction Research*, 3, pp. 165–181.

Power, R., Jones, S., Kearns, G. and Ward, J. (1996), 'An ethnography of risk management amongst illicit drug injectors and its implications for the development of community-based interventions', *Sociology of Health and Illness*, 18, pp. 86–106.

Powis, B., Strang, J., Griffiths, P. et al. (forthcoming), 'Self-reported overdose among injecting drug users in London: extent and nature of the problem', *Addiction*.

Preble, E. and Casey, J. (1969), 'Taking care of business: the heroin user's life on the street', *International Journal of the Addictions*, 4, pp. 1–24.

Preble, E. and Miller, T. (1977), 'Methadone, wine and welfare', in R. Weppner (ed.), *Street ethnography*, Sage, Beverly Hills.

Quemada Nieto, E. (1995), *Impacto del SIDA en los medios cerrados del consumo de heroína*, Instituto Complutense de Drogodependencias, Madrid.

Quirk, A., Rhodes, T. and Stimson, G. V. (1998), '"Unsafe protected sex": insights from qualitative research on measures of sexual risk', *AIDS Care*, 10, pp. 105–114.

Rezza, G., Nicolosi, A., Zaccarelli, M. et al. (1994), 'Understanding the dynamics of the HIV epidemic among Italian intravenous drug users', *Journal of Acquired Immune Deficiency Syndromes*, 7, pp. 500–503.

Rhodes, T. (1995), 'Researching and theorising "risk": notes on the social relations of risk in heroin users' lifestyles', in P. Aggleton, G. Hart and P. Davies (eds), *AIDS: sexuality, safety and risk*, Taylor and Francis, London.

Rhodes, T. (1997), 'Risk theory in epidemic times', *Sociology of Health and Illness*, 19, pp. 208–227.

Rhodes, T. (2000a), 'The multiple roles of qualitative research in understanding and responding to drug use', in J. Fountain (ed.), *Understanding and responding to drug use: the role of qualitative research*, EMCDDA, Lisbon.

Rhodes, T. (ed.) (forthcoming), *Qualitative methods in drugs and alcohol research*, Sage, London.

Rhodes, T., Ball, A., Stimson, G. V. et al. (1999b), 'HIV associated with drug injecting in the newly independent States, eastern Europe: the social and economic context of epidemics', *Addiction*, 94, pp. 1232–1336.

Rhodes, T., Bloor, M. and Donoghoe, M. C. (1993), 'HIV prevalence and HIV risk behaviour among injecting drug users in London and Glasgow', *AIDS Care*, 5, pp. 413–425.

Rhodes, T. and Cusick, L. (2000), 'Love, intimacy and relationship risk management: HIV positive people and their sexual partners', *Sociology of Health and Illness*, 22, pp. 1–26.

Rhodes, T. and Holland, J. (1992), 'Outreach as a strategy for HIV prevention: aims and practice', *Health Education Research*, 7, pp. 533–546.

Rhodes, T., Holland, J. and Hartnoll, R. (1991), *Hard to reach or out of reach?*, Tufnell Press, London.

Rhodes, T., Hunter, G. M., Donoghoe, M. C. et al. (1996), 'Prevalence of markers for hepatitis B virus and HIV-1 infection among drug injectors in London', *Addiction*, 91, pp. 1457–1467.

Rhodes, T., Myers, T., Bueno, R. et al. (1998), 'Drug injecting and sexual safety', in G. V. Stimson, D. C. Des Jarlais and A. Ball (eds), *Drug injecting and HIV infection*, Taylor and Francis, London.

Rhodes, T. and Quirk, A. (1996), 'Heroin, risk and sexual safety', in T. Rhodes and R. Hartnoll (eds), *AIDS, drugs and prevention*, Routledge, London.

Rhodes, T. and Quirk, A. (1998), 'Drug users' sexual relationships and the social organisation of risk', *Social Science and Medicine*, 46, pp. 161–183.

Rhodes, T., Quirk, A. and Stimson, G. V. (1995), *Drug taking and sexual lifestyles: a qualitative study among users of stimulants and opiates*, Centre for Research on Drugs and Health Behaviour, London.

Rhodes, T., Stimson, G. V., Crofts, N. et al. (1999a), 'Drug injecting, rapid HIV spread and the "risk environment"', *AIDS*, 13(Suppl. A), pp. S259–S269.

Rhodes, T., Stimson, G. V., Fitch, C., Ball, A. and Renton, A. (1999c), 'Rapid assessment, injecting drug use and public health', *Lancet*, 354, pp. 65–68.

Robertson, J. R., Bucknall, A. B. V., Welsby, P. D. et al. (1986), 'Epidemic of AIDS-related virus infection among intravenous drug users', *British Medical Journal*, 292, pp. 527–529.

Roig Traver, A. et al. (1987), 'Uso colectivo de jeringas y otros hábitos de consumo de heroína', *Comunidad y Drogas*, 4, pp. 47–53.

Romaní, O. (1991), 'Sida i drogas: de la sobreestigmatizació a la racionalizació del problema', *Medicina y Humanidades*, 40, pp. 62–74.

Romaní, O. (1992), *Drogodependientes: circuitos informales y procesos de integración social*, IRES, Barcelona.

Romaní, O. (1997), 'Etnografía y drogas: discursos y prácticas', *Nueva Antropología*, 52, pp. 39–66.

Rosado, G. T. and Escursell, R. R. (1994), 'Estudio descriptivo de comunidades terapéuticas para drogodependientes', *Adicciones*, 6, pp. 135–151.

Rosenbaum, M. (1981), *Women on heroin*, Rutgers University Press, Brunswick, NJ.

Rotilly, M. (1997), *Prévalence des pratiques à risques en milieu carcéral: une étude pilote à la maison d'arrêt des Baumettes*, Marseille, ORS, France.

Rua-Figueroa, M., Aguilar, M., Estebanez, P. et al. (1992), 'HIV risk factors: differences between male and female injecting drug users in Spain', paper presented at the Eighth International Conference on AIDS (abstract PoC 4254).

Ruggiero, V. (1992), *La roba: economie e culture dell'eroina*, Pratiche, Parma.

Samuels, J., Vlahov, D., Anthony, J. and Chaisson, R. (1992), 'Measurement of HIV risk behaviours among intravenous drug users', *British Journal of Addiction*, 87: 404–417.

Scheidegger, C. and Zimmerli, W. (1989), 'Infectious complications in drug addicts: seven year review of 269 hospitalised narcotics abusers in Switzerland', *Review of Infectious Diseases*, 11, pp. 1044–1046.

Schroers, A. (1995), *Szenealltag im Kontaktcafé*, Verlag für Wissenschaft und Bildung, Berlin.

Seaman, S. R., Brettle, R. P. and Gore, S. M. (1998), 'Mortality from overdose among injecting drug users recently released from prison', *British Medical Journal*, 316, pp. 426–428.

Serfaty, M. A., Lawrie, A., Smith, B., Brind, A. M., Watson, J. P., Gilvarry, E. et al. (1997), 'Risk factors and medical follow-up of drug users tested for hepatitis C', *Drug and Alcohol Review*, 16, pp. 339–347.

Shaw, C. (1930), *The jack-roller*, University of Chicago Press, Chicago.

Shelley, H., Jones, K. and Hunt, N. (1993), *Amphetamine injecting risk: sharing and help-seeking*, Maidstone Health Authority, Maidstone.

Sheridan, J. and Barber, N. (1996), 'Drug misusers' experiences and opinions of community pharmacists and community pharmacy services', *The Pharmaceutical Journal*, 2370, pp. 325–327.

Shiner, M. and Newburn, T. (1996), *Young people, drugs and peer education*, Home Office, London.

Sibthorpe, B. (1992), 'The social construction of relationships as a determinant of HIV risk perception and condom use among injection drug users', *Medical Anthropological Quarterly*, 6, pp. 255–270.

Sifaneck, S. J. and Neaigus, A. (forthcoming), 'Assessing, sampling and screening hidden populations: heroin sniffers in New York city', *Addiction Research*.

Silverman, D. (1985), *Qualitative methodology and sociology*, Gower, Aldershot.

Singer, M. (ed.) (1998), *The political economy of AIDS*, Baywood, New York.

Singer, M. (1999), 'The ethnography of street drug use before AIDS: a historic review', in P. Marshall, M. Singer and M. Clatts (eds), *Cultural, observational and epidemiological approaches in the prevention of drug abuse and HIV/AIDS*, National Institute on Drug Abuse, Bethesda, MD.

Sicking, R. (1994), *Ausstieg aus der Heroinabhängigkeit*, Lambertus Verlag, Freiburg.

Sorensen, H. J., Jepsen, P. W. and Haastrup, S. (1995), *Dødeligheden i en gruppe af 300 intravenøse københavnske stofmisbrugere: dødsfald blandt stofmisbrugere 1970–95*, Sundhedsstyrelsen.

Spradley, J. P. (1970), *You owe yourself a drunk: an ethnography of urban nomads*, Little Brown, Boston.

Stark, K. and Kleiber, D. (1991), 'AIDS und HIV-Infektion bei intravenös Drogenabhängigen in der Bundesrepublik Deutschland', *Deutsche Medizin Wochenschrift*, 116, pp. 863–869.

Sterk, C. (1993), 'Outreach among drug users: combining the role of ethnographic field assistant and health educator', *Human Organisation*, 52, pp. 162–168.

Stimson, G. V. (1990), 'AIDS and HIV: the challenge for British drug services', *British Journal of Addiction*, 85, pp. 329–339.

Stimson, G. V., Fitch, C., Rhodes, T. and Ball, A. (1999), 'Rapid assessment and response: methods for developing public health responses to drug problems', *Drug and Alcohol Review*, 18, pp. 318–325.

Stimson, G. V., Hunter, G., Donoghoe, M. et al. (1996), 'HIV-1 prevalence among community recruited injecting drug users in London (1990–93)', *AIDS*, 10, pp. 657–666.

Strang, J., Powis, B., Best, D. et al. (1999), 'Preventing opiate overdose fatalities with take-home naloxone: pre-launch study of possible impact and acceptability', *Addiction*, 94, 199–204.

Strathdee, S. A., van Ameijden, E. J. C., Mesquita, F. et al. (1998), 'Can HIV epidemics among injection drug users be prevented?' *AIDS*, 12(Suppl. A), pp. S71–S79.

Sueur, C. (1993), 'L'infection par le VIH liée à l'usager de drogue par voie intraveineuse en milieu carcéral: état des lieux', in *Sida, Toxicomanie*, CRIPS, Paris.

Susser, M. and Susser, E. (1996), 'Choosing a future for epidemiology: from black box to Chinese boxes to eco epidemiology', *American Journal of Public Health*, 86, pp. 674–677.

Sutter, A. (1966), 'The world of the righteous dope fiend', *Issues in Criminology*, 2, pp. 177–222.

Svensson, B. (1996), *Pundare, jonkare och andra: med narkotikan som följeslagare*, Carlssons, Stockholm.

Taylor, A. (1993), *Women drug users: an ethnography of female injecting*, Clarendon, Oxford.

Taylor, A., Frischer, M. and Goldberg, D. (1996), 'Non-fatal overdosing is related to polydrug use in Glasgow', *British Medical Journal*, 313, pp. 1400–1401.

Taylor, A., Frischer, M., Green, S. T. et al. (1994), 'Low and stable prevalence of HIV among drug injectors in Glasgow', *International Journal of STD and AIDS*, 5, pp. 105–107.

Taylor, A., Goldberg, D., Emslie, J. et al. (1995), 'Outbreak of HIV infection in a Scottish prison', *British Medical Journal*, 310, pp. 289–292.

Tellier, A. and Sobel, A. (1994), *Étude qualitative sur l'accès et le recours aux soins de la pathologie du VIH par les toxicomanes séropositifs et/ou malades du sida*, Recherche subventionnée par L'agence française de lutte contre le sida, Paris.

Todts, S., Avondts, D., Vercauteren, G. and Piot, P. (1990), 'HIV seroprevalence and risk behaviour in IV drug users in a low HIV prevalence city in Belgium', paper presented at the Sixth International Conference on AIDS.

Todts, S. Fonck, K., Driesen, K., Uydebrouck, M., Vranckx, R., Vercauteren, G., van Mol, F. and Colebunders, R. (1997), 'Tuberculosis, HIV, hepatitis B and risk behaviour in a Belgian prison (1992)', *Archives belges de santé publique*, October.

Turnbull, P., Power, R. and Stimson, G. V. (1996), "'Just using old works": injecting risk behaviour in prison', *Drug and Alcohol Review*, 15, pp. 251–260.

van Ameijden, E. J., van den Hoek, J. A., Mientjes, G. H. and Coutinho, R. A. (1993), 'A longitudinal study on the incidence and transmission patterns of HIV, HBV and HCV infection among drug users in Amsterdam', *European Journal of Epidemiology*, 9, pp. 255–262.

van Beek, I., Buckley, R., Stewart, M., MacDonald, M. and Klador, J. (1994), 'Risk factors for hepatitis C virus infection among injecting drug users in Sydney', *Genitourinary Medicine*, 70, pp. 321–324.

van Beek, I., Dwyer, R., Dore, G. J., Kehui, L. and Kaldor, J. M. (1998), 'Infection with HIV and hepatitis C virus among injecting drug users in a prevention setting', *British Medical Journal*, 317, pp. 433–437.

van de Berg, T. and Blom, N. (1987), *Tippelen voor dope: levensverhalen van vrouwen in de heroïne prostitutie*, SUA, Amsterdam.

van de Berg, T. and Blom, N. (1997), *Heroïne prostitutie: een typologie van leef en werkstijlen*, Dr Graaf Stichting, Amsterdam.

van den Hoek, J. A. R., van Haastrecht, J. J. A. and Coutinho, R. A. (1992), 'Little change in sexual behaviour in injecting drug users in Amsterdam', *Journal of Acquired Immune Deficiency Syndromes*, 5, pp. 518–522.

van Gelder, P. and Sijtsma, J. (1988), *Horse, coke en kansen: Sociale risico's en kansen onder Surinaamse en Marokkaanse harddruggebruikers in Amsterdam*, Instituut voor Sociale Geografie, Universiteit van Amsterdam, Amsterdam.

Vuori, E., Ojanpera, I. and Rasanen, I. (1997), 'Oikeuskemiallisesti toteutet myrkytyskuolemat vuosina 1993–1995', *Suomen Laakarilehti*, 52.

Waldorf, D. (1973), *Careers in dope*, Prentice-Hall, Englewood Cliffs, NJ.

Ward, H., Day, S., Mezzone, J., Dunlop, L. et al. (1993), 'Prostitution and risk of HIV: female prostitutes in London', *British Medical Journal*, 307, pp. 356–358.

Weppner, R. S. (ed.) (1977), *Street ethnography*, Sage, Beverly Hills, CA.

Whyte, W. F. (1955), *Street corner society*, University of Chicago Press, Chicago.

Wiebel, W. (1990), 'Identifying and gaining access to hidden populations', in E. Lambert (ed.), *The collection and interpretation of data from hidden populations*, National Institute on Drug Abuse Monograph 98, Washington, DC.

Wiebel, W. (1996), 'Ethnographic contributions to AIDS intervention strategies', in T. Rhodes and R. Hartnoll (eds), *AIDS, drugs and prevention*, Routledge, London.

Wiessing, L. G., Hartnoll, R. L., Houweling, H., Jager, J. C., Downs, A. M. and Hamers, F. F. (1998a), 'Impact and control of AIDS, HIV and hepatitis B and C among injection drug users in Europe: an exploratory overview', in *Global Research Network Meeting on HIV Prevention in Drug-Using Populations*, Geneva, 25–26 June 1998, National Institute on Drug Abuse/National Institutes of Health/US Department of Health and Human Services.

Wiessing, L. G., Houweling, H., Hartnoll, R. L., Downs, A. M. and Jager, J. C. (1998b), *HIV and hepatitis B/C infection among injecting drug users in Europe*, XII World AIDS Conference, Geneva, 28 June–3 July 1998 (abstract 13192).

Wight, D. (1993), 'Constraints or cognition? Young men and safer heterosexual sex', in P. Aggleton, P. Davies and G. Hart (eds), *AIDS: Facing the second decade*, Falmer Press, London.

World Health Organization (WHO) (1999), *Opioid overdose: trends, risk factors, interventions and priorities for action*, WHO, Geneva.

Znaniecki, F. (1934), *The method of sociology*, Farrer and Rhinehart, New York.

Zule, W. A. (1992), 'Risk and reciprocity: HIV and the injection drug user', *Journal of Psychoactive Drugs*, 24, pp. 243–249.

Zunzunegui-Pastor, M. V., Rodríguez-Arenas, M. A. and Sarasqueta-Eizaguirre, C. (1993), 'Drogadicción intravenosa y riesgo de infección por VIH en Madrid, 1990', *Gaceta Sanitaria*, 7, pp. 2–11.

Zurhold, H. (1993), *Drohenkarrieren von frauen im spiegel ihrer lebensgeschichten*, Verlag fuer Wissenschaft und Bildung, Berlin.

Contributors

This publication is based on the findings of the EMCDDA working group on injecting drug use and risk behaviour. The members of the working group were:

Marina Barnard

Centre for Drug Misuse Research
University of Glasgow
11 The Square
Glasgow G12 8QT
United Kingdom
Tel. (44-141) 339 88 55
Fax (44-141) 339 58 81
E-mail: m.a.bernard@socsi.gla.ac.uk

Jane Fountain

Ethnicity and Health Unit
University of Central Lancashire
c/o DrugScope
32–36 Loman Street
London SE1 OEE
United Kingdom
Tel. (44-20) 79 28 12 11
Fax (44-20) 79 22 87 80
E-mail: janef@drugscope.org.uk

Fabienne Hariga

Modus Vivendi, asbl
Rue de Haerne 51
B-1040 Brussels
Tel. (32) 26 44 22 00
Fax (32) 26 44 21 81
E-mail: modus.vivendi@skynet.be

Tim Rhodes

Centre for Research on Drugs and Health Behaviour
Department of Social Science and Medicine
Imperial College School of Medicine
The Reynolds Building
St Dunstan's Road
London, W6 8RP
United Kingdom

Tel. (44-20) 75 94 07 91
Fax (44-20) 75 94 08 52
E-mail: t.rhodes@ic.ac.uk

Nuria Romo Avilés

Universidad de Granada
Departamento de Antropología y de Trabajo Social
Calle Rector López Argueta, s/n
E-18071 Granada
Tel. (34) 958 22 09 58
E-mail: nromo@ugr.es

Julian Vicente

European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)
Rua da Cruz de Santa Apolónia 23–25
P-1149-045 Lisboa
Tel. (351) 218 11 30 00
Fax (351) 218 13 17 11
E-mail: Julian.Vicente@emcdda.org

Urban Weber

Médecins sans frontières
125267 Chayanova Street, 15
Corpus 5
Moscow
Russia
Tel. (7-095) 250 63 77
Fax (7-095) 250 63 87

Addresses have been updated where necessary.

PRACTICAL INFORMATION

European Monitoring Centre for Drugs and Drug Addiction
(EMCDDA)

Rua da Cruz de Santa Apolónia 23–25
P-1149-045 Lisbon

Tel. (351) 218 11 30 00

Fax (351) 218 13 17 11

E-mail: info@emcdda.org

Web site: <http://www.emcdda.org>

EMCDDA, July 2001

European Monitoring Centre for Drugs and Drug Addiction

EMCDDA Insights Series, Number 4

Injecting drug use, risk behaviour and qualitative research in the time of AIDS

Luxembourg: Office for Official Publications of the European Communities

2001 — 125 pp. — 14,8 x 21 cm

ISBN 92-9168-110-5

Price (excluding VAT) in Luxembourg: EUR 21

BELGIQUE/BELGIË Jean De Lannoy Avenue du Roi 202/Koningslaan 202 B-1190 Bruxelles/Brussel Tel. (32-2) 538 43 08 Fax (32-2) 538 08 41 E-mail: jean.de.lannoy@inboard.be URL: http://www.jean-de-lannoy.be	ÖSTERREICH Manz'sche Verlags- und Universitätsbuchhandlung GmbH Kohlmarkt 16 A-1014 Wien Tel. (43-1) 53 16 11 00 Fax (43-1) 53 16 11 67 E-Mail: manz@schwinge.at URL: http://www.manz.at	EESTI Eesti Kaubandus-Tööstuskoda (Estonian Chamber of Commerce and Industry) Toom-Kooli 17 EE-10130 Tallinn Tel. (372) 646 02 44 Fax (372) 646 02 45 E-mail: einfo@koda.ee URL: http://www.koda.ee	Renouf Publishing Co. Ltd 5369 Chemin Canotek Road, Unit 1 Ottawa, Ontario K1J 3J3 Tel. (1-613) 745 26 65 Fax (1-613) 745 76 60 E-mail: order_dept@renoufbooks.com URL: http://www.renoufbooks.com
La librairie européenne/ De Europese Boekhandel Rue de la Loi 244/Vetstraat 244 B-1000 Bruxelles/Brussel Tel. (32-2) 285 26 39 Fax (32-2) 735 08 60 E-mail: mail@libeurop.be URL: http://www.libeurop.be	PORTUGAL Distribuidora de Livros Bertrand Ld.ª Grupo Bertrand, SA Rua das Terras dos Vales, 4-A Apartado 60037 P-2700 Amadora Tel. (351) 214 95 87 87 Fax (351) 214 96 02 55 E-mail: db@lp.pt	HRVATSKA Mediatrade Ltd Pavla Hatzja 1 HR-10000 Zagreb Tel. (385-1) 481 94 11 Fax (385-1) 481 94 11	EGYPT The Middle East Observer 41 Sherif Street Cairo Tel. (20-2) 392 69 19 Fax (20-2) 393 97 32 E-mail: inquiry@meobserver.com URL: http://www.meobserver.com.eg
Moniteur belge/Belgisch Staatsblad Rue de Louvain 40-42/Leuvenseweg 40-42 B-1000 Bruxelles/Brussel Tel. (32-2) 552 22 11 Fax (32-2) 511 01 84 E-mail: eusales@just.fgov.be	Imprensa Nacional-Casa da Moeda, SA Sector de Publicações Oficiais Rua da Escola Politécnica, 135 P-1250-100 Lisboa Codex Tel. (351) 213 94 57 00 Fax (351) 213 94 57 50 E-mail: spcoe@incm.pt URL: http://www.incm.pt	MAGYARORSZÁG Euro Info Service Szt. István krt.12 II emelet 1/A PO Box 1039 H-1137 Budapest Tel. (36-1) 329 21 70 Fax (36-1) 349 20 53 E-mail: euroinfo@euroinfo.hu URL: http://www.euroinfo.hu	INDIA EBIC India 3rd Floor, Y. B. Chavan Centre Gen. J. Bhosale Marg. Mumbai 400 021 Tel. (91-22) 282 60 64 Fax (91-22) 285 45 64 E-mail: ebicindia@vsnl.com URL: http://www.ebicindia.com
DANMÅRK J. H. Schultz Information A/S Herstedvang 12 DK-2620 Albertslund Tit. (45) 43 63 23 00 Fax (45) 43 63 19 69 E-mail: schultz@schultz.dk URL: http://www.schultz.dk	SUOMI/FINLAND Akateeminen Kirjakauppa/ Akademiska Bokhandeln Keskuskatu 1/Centralgatan 1 PL/PB 128 FIN-00101 Helsinki/Helsingfors P./tn (358-9) 121 44 18 F./fax (358-9) 121 44 35 Sähköposti: sps@akateeminen.com URL: http://www.akateeminen.com	ROMÂNIA Ars Polona Krakowskie Przedmiescie 7 Skr. pocztowa 1001 PL-00-950 Warszawa Tel. (48-22) 826 12 01 Fax (48-22) 826 62 40 E-mail: books119@arspolona.com.pl	JAPAN PSI-Japan Asahi Sanbancho Plaza #206 7-1 Sanbancho, Chiyoda-ku Tokyo 102 Tel. (81-3) 32 34 69 21 Fax (81-3) 32 34 69 15 E-mail: books@psi-japan.co.jp URL: http://www.psi-japan.co.jp
DEUTSCHLAND Bundesanzeiger Verlag GmbH Vertriebsabteilung Amsterdamer Straße 192 D-50735 Köln Tel. (49-221) 97 66 80 Fax (49-221) 97 66 82 78 E-Mail: Vertrieb@bundesanzeiger.de URL: http://www.bundesanzeiger.de	SVERIGE BTJ AB Traktorvägen 11-13 S-221 82 Lund Tlf. (46-46) 18 00 00 Fax (46-46) 30 79 47 E-post: btjeu-pub@btj.se URL: http://www.btj.se	ROMÂNIA Euromedia Str. Dionisie Lupu nr. 65, sector 1 RO-70184 Bucuresti Tel. (40-1) 315 44 03 Fax (40-1) 312 96 46 E-mail: euromedia@mailcity.com	MALAYSIA EBIC Malaysia Suite 45.02, Level 45 Plaza MBI (Letter Box 45) 8 Jalan Yap Kwan Seng 50450 Kuala Lumpur Tel. (60-3) 21 62 32 98 Fax (60-3) 21 62 61 98 E-mail: ebic@tm.net.my
ΕΛΛΑΔΑ/GREECE G. C. Eleftheroudakis SA International Bookstore Panepistimiou 17 GR-10564 Athina Tel. (30-1) 331 41 80/12/3/4/5 Fax (30-1) 323 98 21 E-mail: elebooks@netor.gr URL: http://hellasnet.gr	UNITED KINGDOM The Stationery Office Ltd Customer Services PO Box 23 Norwich NR3 1GN Tel. (44) 870 60 05-522 Fax (44) 870 60 05-535 E-mail: book.orders@theso.co.uk URL: http://www.itsofficial.net	ROMÂNIA Euromedia Str. Dionisie Lupu nr. 65, sector 1 RO-70184 Bucuresti Tel. (40-1) 315 44 03 Fax (40-1) 312 96 46 E-mail: euromedia@mailcity.com	MEXICO Mundi Prensa México, SA de CV Rio Pánuco, 141 Colonia Cuauhtémoc MX-06500 México, DF Tel. (52-5) 533 56 58 Fax (52-5) 514 67 99 E-mail: 101545.2361@compuserve.com
ESPAÑA Boletín Oficial del Estado Trafalgar, 27 E-28071 Madrid Tel. (34) 915 38 21 11 (libros) 915 84 17 15 (suscripción) Fax (34) 915 38 21 21 (libros), 915 84 17 14 (suscripción) E-mail: clientes@com.boe.es URL: http://www.boe.es	ISLAND Bokabud Larusar Blöndal Skólavörðungur, 2 IS-101 Reykjavik Tel. (354) 552 55 40 Fax (354) 552 55 60 E-mail: bokabud@sinnet.is	SLOVAKIA Centrum VTI SR Nám. Slobody, 19 SK-81223 Bratislava Tel. (421-7) 54 41 83 64 Fax (421-7) 54 41 83 64 E-mail: europ@ttb1.sltk.stuba.sk URL: http://www.sltk.stuba.sk	PHILIPPINES EBIC Philippines 19th Floor, PS Bank Tower Sen. Gil J. Puyat Ave. cor. Tindalo St. Makati City Metro Manila Tel. (63-2) 759 66 80 Fax (63-2) 759 66 80 E-mail: eccppcom@globe.com.ph URL: http://www.eccp.com
FRANCE Journal officiel Service des publications des CE 26, rue Desaix F-75727 Paris Cedex 15 Tel. (33) 140 58 77 31 Fax (33) 140 58 77 00 E-mail: europublications@journal-officiel.gouv.fr URL: http://www.journal-officiel.gouv.fr	NORGE Swets Blackwell AS Østergateveien 18 Boks 6512 Etterstad N-0606 Oslo Tel. (47) 22 97 45 00 Fax (47) 22 97 45 45 E-mail: info@no.swetsblackwell.com	SLOVENIA Gospodarski Vestnik Dunajska cesta 5 SLO-1000 Ljubljana Tel. (386) 613 09 16 40 Fax (386) 613 09 16 45 E-mail: europ@gvestnik.si URL: http://www.gvestnik.si	SOUTH AFRICA Eurochamber of Commerce in South Africa PO Box 781738 2146 Sandton Tel. (27-11) 884 39 52 Fax (27-11) 885 55 73 E-mail: info@eurochamber.co.za
IRELAND Alan Hanna's Bookshop 270 Lower Rathmines Road Dublin 6 Tel. (353-1) 496 73 98 Fax (353-1) 496 02 28 E-mail: hanna@cl.ie	SCHWEIZ/SUISSE/SVIZZERA Euro Info Center Schweiz c/o OSEC Stampfenbachstraße 85 PF 492 CH-8035 Zürich Tel. (41-1) 365 53 15 Fax (41-1) 365 54 11 E-mail: eics@osec.ch URL: http://www.osec.ch/eics	SLOVENIA Gospodarski Vestnik Dunajska cesta 5 SLO-1000 Ljubljana Tel. (386) 613 09 16 40 Fax (386) 613 09 16 45 E-mail: europ@gvestnik.si URL: http://www.gvestnik.si	SOUTH KOREA The European Union Chamber of Commerce in Korea 5th Fl. The Shilla Hotel 202, Jangchung-dong 2 Ga, Chung-ku Seoul 100-392 Tel. (82-2) 22 53-5631/4 Fax (82-2) 22 53-5635/6 E-mail: euock@euock.org URL: http://www.euock.org
ITALIA Licosa SpA Via Duca di Calabria, 1/1 Casella postale 552 I-50125 Firenze Tel. (39) 055 64 83 1 Fax (39) 055 64 12 57 E-mail: licosa@licosa.com URL: http://www.licosa.com	ARGENTINA World Publications SA Av. Coroboa 1877 C1120 AAA Buenos Aires Tel. (54-11) 48 15 81 56 Fax (54-11) 48 15 81 56 E-mail: wpbooks@infovia.com.ar URL: http://www.wpbooks.com.ar	SOUTH KOREA The European Union Chamber of Commerce in Korea 5th Fl. The Shilla Hotel 202, Jangchung-dong 2 Ga, Chung-ku Seoul 100-392 Tel. (82-2) 22 53-5631/4 Fax (82-2) 22 53-5635/6 E-mail: euock@euock.org URL: http://www.euock.org	SRI LANKA EBIC Sri Lanka Trans Asia Hotel 115 Sir Chittampalam A. Gardiner Mawatha Colombo 2 Tel. (94-1) 074 71 50 78 Fax (94-1) 44 87 79 E-mail: ebicsl@slnet.lk
LUXEMBOURG Messageries du livre SARL 5, rue Raiffaisen L-2411 Luxembourg Tel. (352) 40 10 20 Fax (352) 49 06 61 E-mail: mail@mdl.lu URL: http://www.mdl.lu	AUSTRALIA Hunter Publications PO Box 404 Aldersford, Victoria 3067 Tel. (61-3) 94 17 53 61 Fax (61-3) 94 19 71 54 E-mail: jpdavies@ozemail.com.au	UNITED STATES OF AMERICA Bernan Associates 4611-F Assembly Drive Lanham MD 20706-4391 Tel. (1-800) 274 44 47 (toll free telephone) Fax (1-800) 865 34 50 (toll free fax) E-mail: query@bernan.com URL: http://www.bernan.com	ANDERE LÄNDER/OTHER COUNTRIES/ AUTRES PAYS Bitte wenden Sie sich an ein Büro Ihrer Wahl/Please contact the sales office of your choice/Veuillez vous adresser au bureau de vente de votre choix Office for Official Publications of the European Communities 2, rue Mercier L-2985 Luxembourg Tel. (352) 29 29-42455 Fax (352) 29 29-42758 E-mail: info-info-opoee@cec.eu.int URL: http://eur-op.eu.int
NEDERLAND SDU Servicecentrum Uitgevers Christoffel Plantijnstraat 2 Postbus 20014 2500 EA Den Haag Tel. (31-70) 378 98 80 Fax (31-70) 378 97 83 E-mail: sdu@sdu.nl URL: http://www.sdu.nl	CYPRUS Cyprus Chamber of Commerce and Industry PO Box 21455 CY-1509 Nicosia Tel. (357-2) 88 97 52 Fax (357-2) 66 10 44 E-mail: demetrap@ccci.org.cy	CANADA Les éditions La Liberté Inc. 3020, chemin Sainte-Foy Sainte-Foy, Québec G1X 3V6 Tel. (1-418) 693 37 63 Fax (1-800) 567 54 49 E-mail: liberte@mediom.qc.ca	