

NIH Public Access

Author Manuscript

Drug Alcohol Depend. Author manuscript; available in PMC 2008 December 9

Published in final edited form as: Drug Alcohol Depend. 2006 April ; 82(Suppl 1): S65–S69.

Strong HIV and hepatitis disclosure norms and frequent risk behaviors among Hungarian drug injectors

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Abstract

Ethnographic interviews and focus groups were conducted (05/2003-01/2004) among injecting drug users (IDUs; n=29) in Budapest, Hungary to assess HIV, Hepatitis B and C (HBV and HCV) related knowledge, norms, attitudes and behaviors. Participants perceived themselves at low risk for infection with HIV but high risk for hepatitis through injection but not sexual exposure. They reported strong disclosure norms for HIV and hepatitis infections, while sexual and injecting risk behaviors were influenced by trust about partners' self-report of infection status. Injecting networks were small, with infrequent syringe sharing among a few close friends. Cookers and drug filters were often shared, and filters were re-used as a backup drug supply. Most sexual relationships were monogamous, where condoms were rarely used. Although participant norms supported HIV/HBV/HCV testing, the lack of available testing facilities was a barrier to getting tested. Strong norms for infection disclosure and for getting tested coexist with engaging in risk behaviors with injecting and sex partners who are close friends. Network interventions among IDUs in Hungary should build on disclosure norms and trust to reduce injecting and sex risk. Testing services should be expanded and access increased so that IDUs can act on and reinforce their norms for testing.

Keywords

Injecting Drug Users (IDUs); Disclosure of infection status; HIV and Hepatitis infections; Risk behaviors; Risk networks

1. Introduction

Since the mid-1990s, there has been a dramatic increase in HIV infections in Central and Eastern Europe. The region, however, has been divided into two distinct areas: a higher-prevalence Eastern region and a lower-prevalence Central region (Hamers and Downs, 2003;

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European Centre for the Epidemiological Monitoring of AIDS, 2003). Hungary is typical of the majority of Central European countries with low levels of HIV infection but high prevalences of HCV (about 30%) and HBV (between 20-30%) among injecting drug users (IDUs) (European Centre for the Epidemiological Monitoring of AIDS, 2003; Ujhelyi et al. 1998). The widespread HCV and HBV epidemics among IDUs in the Central European region are a concern not only in and of themselves, but also because they imply that the conditions for an Eastern European-like explosive HIV epidemic may be present. Given these dynamics, there is an urgent need to understand injecting and sexual risk factors for blood-borne and sexually transmitted infections among IDUs in the Central European region along with factors that contribute to their preventive behaviors. This information can then be incorporated into prevention programs to prevent an HIV epidemic in Central Europe and to control an already existing HIV epidemic in Eastern Europe.

Efforts to prevent HIV and related infections among at-risk populations have often included standard testing and counseling and individual-based interventions, and some have also involved community-based and network interventions (Cabral et al. 1996; Neaigus, 1998; Kelly et al. 1997; Latkin et al. 2003). These interventions aim at preventing the acquisition and transmission of HIV and related infections by increasing IDUs' knowledge about the risks of infections, influencing their perceptions and beliefs about infection and transmission risk, and developing or reinforcing IDUs' social norms that encourage preventive practices (Kalichman, 1998; Peterson and DiClemente, 2000). As an integral step in the development of interventions among IDUs in Hungary, and elsewhere in the Central European Region, research is required to understand these components of preventive interventions. In the following, we assess, among young injecting drug users in Budapest, Hungary, their knowledge, risk perceptions, norms, risk behaviors and risk networks related to HIV/HBV/HCV risk, and their attitudes and behaviors regarding HIV and hepatitis testing and secondary prevention.

2. Methods

Young IDUs were recruited in Budapest, Hungary between May 2003 and January 2004 from non-treatment settings using a combination of targeted sampling, street outreach and chain referral methods as part of a pilot study exploring HIV risk among Hungarian IDUs (Heckathorn, 1997; Gyarmathy and Neaigus, 2005). Sample recruitment was from the needle exchange program, areas in the city where drug use was common, and through referral by participants in the study. Eligibility criteria in this analysis were self-report of injecting drugs (heroin, cocaine, amphetamines or methamphetamines) at least once in the past 30 days and being 30 years old or younger. Screening methods to verify eligibility included urine tests for drug metabolites and inspection of the arms to detect recent injecting marks. Participants were paid for participation and for recruiting their network members who became eligible study participants. All human subjects procedures were approved by the Institutional Review Boards at National Development and Research Institutes, Inc. and the Hungarian Academy of Sciences.

Eligible participants (N=29) provided their informed consent and participated in semistructured in-depth interviews (n=20) and two focus groups (n=9). Interviews were used to explore research topics in depth, while focus groups provided information from group discussions on specified topics. The interview guide included questions about participants' drug use and sex risk behaviors and networks, and their knowledge, norms and perceptions related to HIV/HBV/HCV risk and testing behavior. The focus group guide was a short version with questions asking about these topics as they related to drug users in Budapest. In addition, a short structured questionnaire was used to collect basic sociodemographic information (age, gender, cultural background [ethnic Hungarian vs. Roma/Gypsy], homelessness) and basic drug use behavioral characteristics (age at first drug use, age at first drug injection, and drugs

Drug Alcohol Depend. Author manuscript; available in PMC 2008 December 9.

ever used, ever injected, and used and injected in the past 30 days). All interviews were voice recorded using a digital voice recorder. Interviews were transcribed and data were extracted based on a priori questions of interest (Kelly et al. 2004; Gyarmathy and Neaigus, 2005). Data summaries were analyzed to identify key themes. All names of participants in this report have been changed to protect their identity. Additional information about study protocols and methods is available from the first author of this manuscript.

3. Results

Participants were young and mostly male (Table 1). Many of them were homeless. One female reported having sold sex in the past, and two females - a same-sex couple - reported currently selling sex. The main drug injected in the past 30 days was heroin, followed by amphetamines. Some reported that in the past, as a desperate last resort, they injected a homemade liquid opiate called kompót ("Polish heroin").

Although the majority of participants had sufficient *knowledge*, mostly from the media, about the blood-to-blood transmission routes of HIV infection, few were aware that HIV could be transmitted sexually (Table 2). Many had not heard about hepatitis (B or C) until only recently, and many viewed HBV and HCV as one single entity, "hepatitis", or "hepa". In addition, many believed that one could tell just by looking whether a person was infected.

Participants' perceived themselves at low risk for HIV infection. They explained this by referring to the low level of HIV infection among IDUs in Hungary. However, they believed that IDUs in general were at high risk of getting infected with "hepatitis", but did not view themselves at injecting risk for getting infected. They reasoned that they shared equipment only with close friends, who would not distribute their used injecting equipment if they were infected. Sexually transmitted diseases were not a concern for them. Trust in their injecting network members was often mentioned in connection with risk perception.

"I know many who are infected with 'hepa', but I don't feel at risk of getting infected. I know that they would tell me, and they would never let me use the needle." (Janó, 19-year-old male).

Participants reported strong *infection disclosure and secondary prevention norms* with both injecting and sex partners. Trust in disclosure of infection status was normative as well. No stigma against people infected with HIV/HBV/HCV was reported.

In terms of *risk behaviors and risk networks*, the majority reported using their own injecting equipment most of the time, but sometimes they would share needles/syringes with their sex partners or with two or three of their best friends. All participants reported that the needle exchange program or the pharmacy was their source of needles. Sharing other equipment, such as spoons and filters, was common, especially as a backup drug supply.

"Filters are often used twice. It gets used, then they put it away, then it can be used again for a second cooking" (Bodri, 22-year-old male).

The majority of participants reported being in monogamous sexual relationships, and monogamy seemed to be normative. None of the participants reported using condoms in their main relationships, and only a few with occasional partners. Trust, again, was a motive for not using condoms. The former commercial sex worker (CSW) female rarely used condoms with paying customers. The current CSW same-sex couple used no barriers with each other, but required paying customers to use condoms. They reported that they could "afford" refusing unprotected vaginal sex with paying customers because they did not have pimps who demanded daily quotas.

Participants expressed positive attitudes towards *getting tested* for HIV/HBV/HCV infections. They reported that testing places were hard to find: only a few drug treatment programs offered testing, and some may not even supply them with their test results. They seek testing when one of their close friends tests positive for an infection, mostly HCV, or get tested when imprisoned.

Many participants reported not only complying with the disclosure norms but also taking *secondary prevention* actions with their injecting partners. Participants who reported being infected said that they told others not to use their injecting equipment, and they even broke off the needles to prevent others from reusing them.

4. Discussion

We found strong HIV and hepatitis disclosure norms co-existing with frequent risk behaviors among Hungarian drug injectors. Strong disclosure norms may be the result of timely prevention messages early in the HIV epidemic. Despite frequent risk behaviors, compliance with disclosure norms and small risk networks could provide a possible explanation for the current low levels of HIV among IDUs in Hungary, as compared to the widespread epidemics in IDUs in Eastern Europe.

In terms of knowledge about HIV and hepatitis infections, perception of being at risk, and risk behaviors and risk networks, Hungarian IDUs seem to be more similar to many Western European or North American IDUs than to Eastern European IDUs (Rhodes et al. 2004a; Haw and Higgins, 1998; Fennema et al. 1997; Van Ameijden et al. 1999; Neaigus et al. 1995). Hungarian IDUs' perception of risk and their injecting and sex risk behaviors are based on trust and on personal risk assessment: equipment sharing "never" occurs - except with few close and trusted friends (Rhodes et al. 2004a), and condoms are rarely used in their monogamous sexual relationships. In Russia and the Ukraine, even though many IDUs perceive their infection risk as low, they often have high-risk injecting and sex behaviors and networks: they commonly share syringes, even with people whom they do not know well (Abdala et al. 2003; Booth et al. 2004; Amirkhanian et al. 2003; Rhodes et al. 2004b), and they have large numbers of sex partners and concurrent partners (Hamers and Downs, 2003). However, sharing spoons and filters was common and viewed as less risky among participants of this study (Huo et al. 2005; Millson et al. 2003). This is of concern especially because of HCV infection risk (Thorpe et al. 2002; Hagan et al. 2001).

Infection disclosure norms and secondary prevention practices vary among Western European and North American IDUs, and may be different based on the type of infection (Van Ameijden et al. 1999; Schlumberger et al. 1999; Ompad et al. 2002; Des Jarlais et al. 2004). Disclosure and secondary prevention are rare among IDUs in some Eastern European countries (Booth et al. 2004; Gore-Felton et al. 2003; Amirkhanian et al. 2003; Rhodes et al. 2004b). In this study, we found strong disclosure and secondary prevention norms for HIV, HBV and HCV. However, Hungarian IDUs may have inadequate knowledge of their actual infection status because of a lack of available free and confidential testing facilities.

The small sample size of this pilot study is a limitation of the analysis. However, participants' reports about norms, attitudes, and behaviors were consistent with prior studies in Hungary. For example, in a previous study among prison inmates in Hungary we found that former CSW female inmates had engaged in unprotected sex for more money when customers were few in order to satisfy the daily quota of their pimps (Gyarmathy et al. 2003). The two current CSW

Drug Alcohol Depend. Author manuscript; available in PMC 2008 December 9.

Our findings have implications for the prevention of HIV and other, blood borne or sexually transmitted infections among IDUs in Hungary, and possibly in other Central and Eastern European countries. Given the strong infection disclosure norms and secondary prevention behavior, network interventions would be an appropriate prevention approach among IDUs in Hungary (Neaigus, 1998; Latkin et al. 2003). Such interventions that also target the prevention of sharing other injecting equipment (such as spoons and filters) and sex risk, should be an ongoing priority. This, however, also requires the wide availability of free and anonymous testing and counseling services specifically targeting IDUs, especially in drug treatment programs and other institutional settings where hidden populations such as drug users could be reached (Gyarmathy et al. 2004).

Acknowledgements

The study was sponsored by the United States National Institute on Drug Abuse, grant R03 DA15313-01 "Young Drug Users and HIV Risk in Budapest, Hungary". We would like to thank the research and support staff and all our interviewees for participating in the study.

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Drug Alcohol Depend. Author manuscript; available in PMC 2008 December 9.

Gyarmathy et al.

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Table 1

Characteristics of the sample - young injecting drug users in Budapest, Hungary

Characteristics	N (%)
Total	29 (100)
Age - mean (SD)	23.6 (3.6)
Cultural background	
Hungarian	27 (93.1)
Roma	2(6.9)
Gender	
male	20 (69.0)
female	8 (27.6)
Homeless	9 (31.0)
Age at first illicit drug use	15.7 (2.6)
Age at first drug injection	17.7 (3.1)
Years since first injection	6.8 (2.7)
Drugs injected in the past 30 days	· · · · · · · · · · · · · · · · · · ·
heroin	23 (79.3)
amphetamines	10 (34.5)
prescription medications	5 (17.2)
cocaine	3 (10.3)
street methadone	2(6.9)
alcohol	2(6.9)
other opiates	1(3.4)
other drugs	1(3.4)

Note: none of the participants indicated injecting crack or ketamine in the past 30 days.

Knowledge, norms, perceptions and behaviors related to HIV/HBV/HCV risk and testing behavior among young injecting drug users in Budapest, Hungary

Knowledge about HIV/HBV/HCV	Diad to blood terrorizione la cuiled coble
HIV	Signal transmission: knowledgeable
UDV and UCV	Sexual transmission: nule knowledge
HBV and HCV	
Risk perception - injecting risk	Low risk of HIV, high risk of HBV/HCV infections
	Trust based on infection disclosure
Risk perception - sexual risk	Do not feel at risk of HIV/HBV/HCV infections
	Trust based on infection disclosure
Norms of infection disclosure	Strong disclosure norms
	Trust that injecting/sex partners will disclose infection
Risk networks and risk behaviors: Injecting risk	Emphasis on using sterile syringes/needles
	Spoons and filters were shared often
	Filters reused as backup drug supply
Risk networks and risk behaviors: Sex risk	Monogamous sexual relationships: norm and practice
	No condom use with main partners
	Occasional condoms use with casual partners
Serotesting - attitudes and behaviors	Favorable attitudes towards testing
0	Testing places hard to find
Secondary prevention behavior	Warning others about infection status
5 F	Infected breaking off needles to prevent reuse
	Infected letting uninfected use other injecting equipment first
Use of needle exchange and nharmacy	Almost all used needle exchange
Use of needle exchange and pharmacy	Eraquant nharmaay nurahasaa
	Frequent pharmacy purchases