

MEDIUMS TO REACH
INJECTION DRUG USING POPULATIONS

A DISCUSSION PAPER

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Executive Summary

Although the hepatitis C virus (HCV) is relatively new to the healthcare scene, it is attracting a great deal of attention, and compared to HIV, it is far more easily transmitted through blood-to-blood contact. Currently, through injection drug use the sharing of needles is the most important mode of transmission of HCV in Canada, accounting for approximately 70% of all prevalent infections (LCDC, 1999). With no vaccine yet available to avert new HCV infections, a key prevention measure is to assist people who partake in or who are at risk of engaging in injection drug use (IDU) to eliminate or reduce their risky behaviours. To facilitate this end, it is critical to understand the most effective medium(s) to reach this population.

This report represents a synthesis of information on mediums to reach the IDU population compiled from the published literature, as well as discussions with national/international organizations working with this population. The focus of most of the research in this area has been on assessing the effectiveness of prevention and harm reduction initiatives in changing risky behaviours, particularly in relation to HIV. Nonetheless, components of this research do provide insight into the capacity of various strategies for contacting segments of the drug using population.

Reliable estimates of the number of individuals participating in injection drug use in Canada are difficult to obtain. Current estimates range from 75,000 to 125,000 Canadians (Single, 2000). Often, those involved in injection drug use are heavy, dependent users with a lifestyle that marginalizes them from mainstream society. Drug users often live in poor social conditions, have limited education, are unemployed and have difficult relationships (Wiebe and Single, 2000). Users of injection drugs are not a homogenous group, which makes efforts to reach them somewhat challenging. Nonetheless, these individuals do have extensive and active networks that are used for disseminating information about the quality, price and availability of drugs. These networks have been used creatively for disseminating HIV prevention messages (Ross, 1992; Neaigus, 1998).

A common approach that has been used to reach people who inject drugs is outreach. Outreach typically involves trained professionals who frequent known 'haunts' of those involved in injection drug use in an attempt to disseminate information, provide clean needles and refer individuals to medical services. Although this approach represents an important medium for reaching this population, the disadvantage is that a large segment of those who inject drugs may be missed. This includes individuals who do not frequent inner city areas or, simply, are not receptive to outreach efforts.

The establishment of a peer-driven process appears to result in a more effective and efficient approach for reaching the hidden population of individuals engaging in injection drug use. Involving those who share the culture and/or some of the behaviours of individuals involved in injection drug use in outreach efforts has shown to be effective in expanding the segment of the population reached. This approach has demonstrated success with both adult and youth populations (Broadhead et al., 1998; Loxley and Davidson, 1998; Southgate and Hopwood, 1999).

Peers can also play a significant role in reaching a population that is critical to the prevention of hepatitis C, namely, those who are at risk of engaging in injection drug use. There is evidence to suggest that individuals who are involved in injection drug use can intervene with potential initiates to reduce the adoption of injection practices (Hunt et al., 1998). An area worthy of further study is the feasibility and effectiveness of employing such an approach to reach those at risk of engaging in injection drug use in Canada.

The evidence on the potential role of the mass media as a medium for reaching segments of the drug using population is somewhat conflicting. Research in the United States and Australia has found individuals involved in injection drug use to be consumers of television, radio and newspapers (Jason et al., 1993; Ross et al., 1992). However, discussions with staff working with injection drug using populations in Vancouver and Toronto indicate that the mass media is not an effective approach for reaching this population. Research examining the media consumption habits and information sources of those involved in injection drug use in Canada is required to assess the relative

benefits of utilizing the mass media as a method to reach this population.

For federal, provincial/territorial and local public health policy makers to be effective in the development of messages to change high-risk behaviour by the people who inject drugs, there must be a better understanding of how to reach this population.

Communication strategies need to define this group's characteristics and their networks.

This will enhance understanding of what drives their high-risk behaviour and, in turn, what are the most appropriate methods for disseminating information and services. This report provides the basis for this discussion and demonstrates that more research is needed to better assess the mechanisms for reaching those most at risk for acquiring hepatitis C.

Objective

The focus of many of the studies examining the transmission of blood-borne viruses in individuals engaging in high-risk behaviours has been to determine the effectiveness of health promotion, prevention and harm reduction initiatives on a defined segment of that population. A large percentage of these studies address issues pertaining to those individuals affected by HIV, with limited attention to those with hepatitis C. This report examines **'the ways and means'** of **reaching** those most at risk of contracting the hepatitis C virus, the people who inject or who are at risk of injecting drugs. The emphasis is on mediums to access these populations, and not on the effectiveness of strategies in changing risky behaviour.

Introduction

The hepatitis C virus (HCV) was only identified in 1989 (Choo et al., 1989), and since that time, studies of infected populations have grown in frequency and sophistication. Although a limited form of national reporting of HCV infection in Canada started in 1992, it was not until January 01, 1999, that all Canadian provinces and territories were required to report HCV cases (LCDC, 1999). In 1997, a total of 19,571 cases were reported. The prevalence of HCV infection in Canada is estimated at 0.8% (240,000 persons) (Remis, 1998).

The lack of symptoms, as well as the absence of a test to distinguish new cases from chronic cases, make s it very difficult to estimate the projected incidence of HCV. An enhanced surveillance system to identify cases of acute HCV was established in four Canadian cities in October 1998. The extrapolated results suggest that 911 cases of clinically recognized acute hepatitis C could be identified in Canada (Zou, Zhang, Tepper, et al., 2000). If infections without symptoms (70%) are included in the estimate, the total number of new HCV infections is estimated at 4,500 per year (Zou, Zhang, Tepper, et al., 2000).

As with HIV, the sharing of contaminated needles and syringes increases the chance of

infection dramatically. **Compared to HIV, however, HCV is 10 to 15 times more infectious by the spread of blood** (Heintges and Wands, 1997; Liddle, 1996; Mather and Crofts, 1999). Hepatitis C infection among people who inject drugs occurs at an alarming rate, and injecting is considered the most important route of transmission. In Canada, 70% of all prevalent infections are related to injection drug use (LCDC, 1999). Worldwide HCV prevalence estimates range from 50% to 100% infection rate among drug injecting populations (Finch, 1998).

It is difficult to establish precise figures for the extent of injection drug use in Canada. It has been estimated that there are between 75,000 and 125,000 individuals in Canada who are injecting drugs (Single, 2000). Much of the information available on the characteristics of users of injection drugs is drawn from participants in needle exchange programs or treatment programs. Presently, a young, single person at the low end of the economic scale is characteristic of those at greater risk of sharing needles and other drug paraphernalia. Within the larger population of those who inject drugs, sub-populations have been identified that have unique characteristics that place them at greater risk of contracting HCV. These include prison populations, street-involved youth, women and Aboriginal people in Canada who are engaging in injection drug use (Wiebe and Single, 2000). Compared to the general characteristics of drug users, individuals involved in injection drug use are more likely to be heavy, dependent users with a lifestyle that revolves around their drug use and marginalizes them from mainstream society (Millar, 1998).

With no vaccine yet available to avert new HCV infections, a key prevention measure is getting new people who partake in injection drug use (IDU) to eliminate or reduce their risky behaviours. To facilitate this end, it is critical to understand the most effective medium(s) to reach this population. This report represents a synthesis of information on mediums to reach the IDU population compiled from the published literature, as well as discussions with national/international organizations working with this population.

Although most of the experience documented to date regarding people who inject drugs

has been with the HIV population, there are similarities between the HIV and HCV populations with respect to their practice patterns and demographics, which makes the analysis of the HIV literature of value to this paper. At the same time, the literature and experience also indicates there are some dissimilarities that may require different approaches in delivering programs to the HIV and HCV populations. HCV positive individuals appear to represent a much more diverse group than HIV positive persons, both socially and geographically (Wiebe and Single, 2000). Therefore strategies for contacting the HCV population need to take into account the unique characteristics of this group.

Methodology

A review of the literature was conducted to identify the best practices and methods for reaching potential and active users of injection drugs. These individuals comprise an illusive population and, although there are studies that address changing high-risk behaviour, there are a limited number of reports that specifically address methodologies for reaching these groups. Contact was also made with organizations responsible for providing services to the drug using population in Vancouver, British Columbia; Toronto, Ontario; and Montreal, Quebec (see appendix for a list of contacts). The intent was to acquire first hand experience with how these programs reached the drug using population within each community.

Outreach

A strategy that has been used to reach people who inject drugs in the prevention of HIV/AIDS is community outreach. Street outreach workers provide a range of services including risk reduction messages and instruction, needle exchange and referrals to medical services. Basic risk reduction activities include the provision of literature on disease prevention, distribution of condoms for safer sex, bleach kits for decontaminating injection equipment, HIV testing and counselling, and referral to drug or medical services (Coyle, Needle & Normand, 1998).

Outreach programs have been found to be effective in reducing high-risk behaviours in persons who utilize drugs (Gibson, McCusker, & Chesney, 1998), albeit much of the work to date had been in evaluating the incidence of HIV. Coyle et al. (1998) examined the effectiveness of outreach-based HIV prevention programs by synthesising the results from 36 intervention outcome studies. The relationship between outreach and behaviour change was revealed by substantial reductions in needle-related risk behaviours reported at follow-up. In the combined results, approximately one-quarter of individuals stopped injecting drugs and monthly frequency of injection reduced by nearly 40%. The re-use of syringes and other injection equipment declined by 20% and 27%, respectively. Although these findings are encouraging, Coyle et al. (1998) stressed the need for research to ascertain the components of outreach that work and the types of people they work for.

One of the limitations of outreach efforts is that a large portion of individuals who inject drugs may be missed. This was clearly shown in a study conducted by Greenberg and colleagues (1998) that examined exposure levels to street outreach. The study was part of the AIDS Evaluation of Street Outreach Project, a five-year collaborative US study that targeted people who inject drugs in Atlanta, Chicago, Los Angeles, New York and Philadelphia. Street populations were interviewed before and three to nine months after the introduction of enhancements to existing outreach programs. Researchers identified fixed sites (shelters, drop-in centres) and on street gathering areas (drug buying areas) where individuals were to be found. Interviews were scheduled by time of day and day of week so that all relevant times would be represented. On average, about one-half of the people who inject drugs had talked with an outreach worker within the past six months, and about one-third had talked with an outreach worker in the past month. These findings reveal that outreach workers are missing a significant proportion of this population. According to the authors, outreach workers often position themselves in main walkways where people who inject drugs must approach them, rather than aggressively seeking less available users.

There is limited Canadian literature that specifically examines the efficacy of communication strategies to reach populations that are injecting drugs. A study which is

near completion at the Université de Sherbrooke has determined that the needle exchange program, in conjunction with street workers, proved to be an effective means for contacting users of injection drugs in the Montreal area (Dr. van Caloen, personal communication, May 2000).

The Downtown Eastside Youth Activities Society (DEYAS) youth residential program in Vancouver found the best approach to contacting young people who are injecting drugs is through street front services or by attempting to meet youth in their environment. Using traditional forms of media did not prove to be effective. Staff have been able to achieve some success in providing written messages on placemats at the restaurants frequented by the youth; as well, staff have used "hooks", such as providing free bus tickets to visit the centre, driving them to appointments and providing free lunches (Mo Townsley, personal contact, May 2000).

Peer-Driven Intervention

Traditional public health efforts have placed health care professionals within the ranks of the injecting drug community to provide information on the risks associated with their behaviour, assessing health needs, referring to appropriate services and distributing condoms and bleach kits. Although this technique can produce positive outcomes, having the injecting drug community directly involved in working with its own can enhance success. For instance, studies have shown that 'peer-driven intervention' (PDIs) can reach a larger and more diverse set of people who inject drugs, and do so more effectively and efficiently (Broadhead et al., 1998; Crofts and Herkt, 1995; Grund et al., 1992; Latkin, 1998). Peers have been broadly defined as individuals who share the culture and/or some behaviours of individuals involved in injection drug use (Pulley et al., 1996).

Broadhead and colleagues (1998) compared the effectiveness of PDI and traditional outreach interventions (TOI) over a two-year period in medium sized towns in eastern and central Connecticut. The TOI is based on a provider-client model in which professional outreach workers deliver services. The results showed that PDIs were able to contact a larger number of clients (36% higher than TOIs) with a wider disbursement of

participants (outside region 54%, compared to 28%), which was likely reflective of the diversity in the PDIs personal network in the injecting drug community. Furthermore, people who inject drugs were more receptive of material provided by PDIs than TOIs and had greater knowledge gains. With respect to reducing high-risk behaviours, such as injection frequency and the sharing of drug paraphernalia, the PDI marginally outperformed the TOI.

The effectiveness of PDIs in reaching the IDU population was also supported by a study conducted in Australia, which highlighted the importance of sharing information within user networks. In this study, people who inject drugs cited their primary source for information as being the drug dealers and experienced users (Southgate and Hopwood, 1999). Although both the TOI and PDIs produced significant reductions in high-risk behaviours (needle sharing), as measured by self-reports, the PDIs outperformed the TOI. PDIs reached a much larger group and they recruited a more diverse (ethnic) set of people who inject drugs. In addition, PDIs were found to be 1/13 of the cost.

The effectiveness of PDIs in reaching the IDU population is consistent with the experiences in Toronto. According to public health staff in Toronto, only a small percentage of people who inject drugs have access to a television or radio. Contact with the IDU population is achieved by hiring people who inject drugs as PDIs. Staff train the PDIs on safe practices, and then the PDIs visit the streets and known shooting galleries distributing resource material and on occasion referring other people who inject drugs back to counselling staff (Shawn Hopkins, personal contact, May 2000).

Peer-driven strategies have also been recommended as a promising means for reaching youth who engage in injection drug use. Martinez (1998) conducted an in-depth examination of differences between homeless, substance using youths who do and do not inject drugs. In total, 186 street youth were recruited. Youth who injected drugs were more likely than non-users to report the following: parental substance use, being kicked out of the house, placed into long-term care, personal use of alcohol and other non-injection drugs, a history of survival sex, and the use of squats or abandoned buildings as

shelter. This is the first study to find a relationship between a specific youth subculture and people who inject drugs.

According to Martinez (1998), these important differences support the need for targeted prevention and early intervention services for distinct populations of street-involved youth. Although most youth in the study had some involvement with treatment programs, universally those who injected drugs held negative opinions of treatment services. In this regard, peer designed and led programs may offer a more promising approach. As stated by one 19 year old participant involved with injection drug use, "Prevention with squatters should be done by other squatters because they understand the lifestyle and the things that make being safe difficult" (Martinez, 1998, p.9).

Similar conclusions have been voiced by Loxley and Davidson (1998), who argue that peer educators offer the best opportunity to modify risk amongst young people who inject drugs and are therefore hidden from the mainstream of health education. Compared to other approaches, peer-driven approaches are more effective in making contact with young people at risk, as well as being more credible advocates of health promoting behaviour.

Media Sources

The mass media, defined as television, radio and newspapers, can reach large numbers of people to increase public awareness of health issues and to provide facts that can lead to increased knowledge about an issue. Although earlier public communication strategies did not achieve the desired outcome of changing behaviours with regards to public health issues, later work targeting specific at-risk groups and pre-testing messages with research has led to success (Palmgreen 1995). People involved in injection drug use have been generally stereotyped as individuals who "do nothing more than consume drugs and commit crimes." This has resulted in the mass media not being considered an ideal medium by which to reach this population (Elwood and Ataabadi, 1997). However, studies that have examined media use by this population do not support such stereotypes, but rather, suggest that the mass media could occupy an important mechanism for

accessing this heterogeneous group.

In 1988/89, a cohort of 2921 people who inject drugs was recruited through clinics, street outreach programs and word of mouth in Baltimore to participate in a longitudinal study of persons considered to be "street IDUs" (i.e. injecting users who may not be in drug treatment) (CDC, 1991; Jason, et al., 1993). A representative sample of 353 cohort members completed questions related to information sources of HIV information and media use. Forty-eight percent of all respondents reported that they learned the most about AIDS from television, and 53% listed television as their most frequent current source of AIDS information. Women were significantly more likely than men to have learned about AIDS from friends (31% vs. 23%), drug-treatment programs (9% vs. 4%), or health-care workers (6% vs. 2%) and less likely to have learned about it from television (44% vs. 50%) or newspapers (0% vs. 7 %).

Participants watched television a median of 28 hours per week, and only four respondents indicated that they watched no television. The amount of viewing did not vary with gender, age, level of education, permanent residence status, receipt of social welfare assistance, or prior incarceration status. The majority (83%) of the sample listened to radio (median 12 hours per week), although a very small percentage (less than 1%) indicated they received information from this medium. It appears that there is a relationship between the amount of time an individual actually views or listens to a major media source (television, radio) and the amount of information they acquire. For example, even though a large percentage listened to the radio, participants did not identify this as a source of information. As well, there was no relationship between television exposure and gender, yet males and females indicated a difference in where they obtained their information.

Ross and colleagues (1992) examined the media habits of a sample of 797 people from Sydney, Australia who inject drugs. The results described useful media avenues and times to reach this group. The large majority of respondents (85%) watched television, with 81% having a television and 90% a radio in their households. The majority read

newspapers, 56% daily and a further 37% weekly. Consistent with the general population, most users of injection drugs preferred to listen to the radio in the morning and view television in the evening. However, the preferred stations differed between those who injected drugs and the general population. Comparisons with the general population regarding newspaper consumption were not made. When asked which mass medium would be the most effective for delivering information about AIDS to this group, 77% stated television, 12% radio and 6% newspapers or magazines. About one-third (32%) of respondents indicated a willingness to distribute educational pamphlets about HIV/AIDS and IDU to other people who inject drugs.

In another study, sources of HIV information and risk taking behaviours were examined in a sample of 774 people who inject drugs (584 males, 190 females) from Texas, Colorado and California (Wolitski et al., 1996). The majority of participants (80.7%) reported receiving HIV information from at least one source in the past three months. The most frequently mentioned information source was television (40%) followed by friends and family (22%). There were few significant differences between men and women with regard to sources of HIV information. Despite relatively high levels of HIV knowledge and recent exposure to HIV information, engagement in risky injection practices was common. Most participants (76%) reported sharing injection equipment, and 59% had not used bleach to disinfect at last injection. According to the authors, these findings reinforce the need for intervention efforts to go beyond simple education to attempting to modify attitudes regarding the acceptability and preference for using bleach.

Elwood and Ataabadi (1997) examined media consumption among users of injection drugs, and their recall levels of HIV/AIDS messaging through public health campaigns. The sample consisted of 103 out-of-treatment individuals who injected drugs in Houston. A series of targeted sampling techniques, designed for difficult to reach populations, was used in an attempt to obtain a representative sample of people who inject drugs from the area. Consistent with other research, the majority (69%) watched television, listened to the radio (88%) and read newspapers or magazines in a given week (59%). Other sources of information included posters (44%), billboard ads (37%), bus side ads (28%), flyers

(24%) and bus stop signs (17%). Just over three-quarters (76%) recalled drug or HIV/AIDS media intervention campaigns.

The research suggests that television, radio and newspapers are a potentially effective means of reaching people who inject drugs. However, caution in interpreting these results is advised, as it is not clear whether these results can be generalised to the Canadian context. Staff working with individuals involved in injection drug use in Toronto and Vancouver report that the mass media is not an effective means of reaching this group, as most users of injection drugs do not have access to a television or radio. An area worthy of further investigation is media consumption and information sources of those who inject drugs in Canada.

Targeting Sub-Populations

High-risk drug behaviours occur more frequently in certain groups, due to complex social, economic and cultural factors (Wiebe and Single, 2000). Injection drug use is a key issue among the most vulnerable and marginalized individuals in society, such as those with a history of child abuse, those with mental illnesses, the homeless and street-involved youth. There is evidence showing that females who inject drugs are often less able to resist pressure to share needles than their male partners (Whynot, 1998). Injection drug use and its health and social consequences have become an increasingly salient issue for Aboriginal people in Canada in both community and urban settings (B.C. Aboriginal HIV/AIDS Task Force, 1999; Minuk, 1999).

There has been minimal documentation of the most appropriate mediums for sub-populations of people who inject drugs. There are a few examples of successful approaches that are currently being utilized to access different segments. For instance, DEYAS in Vancouver has achieved some success accessing IDU youth through creative incentive approaches. Nonetheless, there is a clear need for research that examines the best ways for reaching various segments of the Canadian IDU population.

Compounding the difficulties in identifying the target group is the uncertainty of how

best to reach the 'new' or potential user. These are the individuals that may be using drugs but are in the early stages of use, or are not injecting but are at risk of starting. Evidence suggests that transition to injecting as the preferred route of drug administration occurs quite quickly after the first injection (Griffiths et al., 1994). As such, there is significant value in interceding before injection drug use begins. Although minimal information is available, there are a few examples of successful approaches that have been used to reach individuals who are at risk of starting to engage in injection drug use (Hunt et al., 1999).

One approach seeks to identify those who are at risk of injecting, and intervene to reduce the adoption of injecting practices. This type of approach was used to deliver an intervention to heroin sniffers in New York, a population considered to be at risk of making the transition to injection drug use (Hunt et al., 1999). Although a multi-faceted approach was used to reach participants, newspaper advertisements were found to be the most successful recruitment method.

Another approach focuses on current users of injection drugs in an attempt to reduce their influence on non-injecting drug users. An example of this approach is a brief intervention developed for individuals involved in injection drug use in the United Kingdom (Hunt et al., 1998). Participants were recruited primarily from treatment centres. The objectives of the intervention were: to increase participants' awareness of the risks when someone injects for the first time, reduce activities that may increase initiation of others into injecting, increase competence in managing initiation requests and increase disapproval of initiation and reluctance to initiate others. Three months following the intervention the results showed significant increases in participants' disapproval of initiating non-injectors, fewer individuals being initiated and fewer participants reporting injecting in front of non-injectors. This approach, which is a variation of a peer-driven intervention, has the potential of reaching and intervening with individuals that are critical to preventing the spread of HCV.

Research Methods

A number of creative strategies have been employed in the research arena to encourage

participation in research studies requiring information from persons who practice high-risk behaviours. Some of these techniques may provide insight into communication strategies that can be employed in prevention initiatives. Below is a list of various methods that have been used by the National Centre on HIV Social Research, the University of New South Wales, Australia, to obtain purposive samples of this 'difficult-to-reach' and diverse population (Susan Carruthers, personal communication, May 2000). This centre has occupied an important role in extending understanding of the nature of injection drug use among sub-populations, and the implications for the spread of the hepatitis C virus. Some of the methods discussed have been employed in Canada.

- **Snowballing** – either by using small 'snowball cards' containing brief information about the study (e.g. who is conducting the study and what it is about) and contact numbers for people wishing to participate. With electronic snowballing, information about a study is passed to the organizers of, for example, Raves who have access to email lists of regular patrons. The organizers then snowball through networks of clubbers/ravers. It is important that snowballing cards are attractively designed and contain appropriate information about the study, ensure confidentiality and anonymity, and state conditions and any financial inducements for responding to the research ad.
- **Press articles in sub-culturally relevant print media** – articles provide an opportunity for the dissemination of detailed information concerning a specific study. Examples include street newspapers, the lesbian and gay press, youth magazines, free street music papers, dance and clubbing magazines and other lifestyle print material.
- **Advertisements** – for a study placed in classified sections of papers and magazines; targeted print material; and ads in the free street press.
- **Peer recruitment** – known injection drug users can assist in locating and snowballing information through their defined networks.

- **Posters, fliers and postcards** – placed in sub-culturally relevant urban areas such as coffee shops, bookstores, record shops, bars, medical clinics, etc. Posters with tear-off contact numbers printed on the bottom can be useful. Fliers and postcards can also contain detailed information about a study and how to contact researchers. This recruitment strategy needs to be carefully targeted to include areas where, for example, gays/lesbians or other minorities live and/or frequent. Toronto Public Health Department staff utilize tear-off fliers at known 'haunts' and have found it highly effective in disseminating information on the locations of their clinics in the city. As well, they place the name of the clinics and the telephone number on match covers, t-shirts and sweat shirts that are given away (Shawn Hopkins, personal contact, May 2000).
- **A customized web page** – designed to advertise a specific study, enables potential participants to obtain information about the study and to conveniently and anonymously respond via email. Links from other relevant web sites enable participants to access a study's home page.
- **Other web sites** – advertisements for a study can be placed in the 'Personals', 'Messages' and 'Classified sections on web pages that have this option.
- **Stalls at community/commercial events** – liaising with event organizers to set up stalls at community/commercial events whereby interested people can access information about studies, volunteer to participate, or complete questionnaires on the spot. For example, music festivals have been used as a venue to recruit youth.
- **University and other post-high school educational institutions** – these offer easily accessible populations of potential participants, especially for studies involving youth.

In order to maximize response to advertisements, it is important that the language is sub-

culturally appropriate and specific to the task. The language, design and look of the advertisement need to be carefully tailored to appeal to the targeted population.

Discussion

A key to information sharing within a population engaged in high-risk behaviours is the development of a well-defined communication structure. In North America and Europe, this has been exemplified by the gay/lesbian community in the development of HIV strategies. Gay/lesbian persons have used their existing community infrastructure and resources to set up supportive networks, conduct educational programs which have had an influence on behaviour, and enhanced their ability to lobby governments for funding to support services (Nutbeam et al., 1991; Ross, 1992).

By contrast, individuals who use injection drugs are not a homogenous group, which makes efforts to reach them somewhat challenging. They are geographically and socially diverse, and participants usually have only two things in common: their drug use and the stigma associated with their behaviour. Furthermore, drug users often live in poor social conditions, have limited education, are unemployed and have difficult relationships (Wiebe and Single, 2000). Nonetheless, individuals involved in injection drug use do have extensive and active networks that are used for disseminating information about the quality, price and availability of drugs. These networks have been used creatively for disseminating HIV prevention messages (Ross, 1992; Neigies, 1998).

Outreach is a common approach that has been adopted to provide services to drug injecting populations. In the early 1980's the necessity of having the health practitioner go out to the source, rather than expecting the client to come to them to seek information regarding safe practices in curbing the spread of HIV, was realized. The level of success appears to vary by project, but in general people who inject drugs do not perceive these workers as a threat (Elwood et al., 1995). A major limitation of outreach, however, is that it may fail to reach important sub-populations, such as those that do not frequent inner city areas or are simply not receptive to outreach efforts.

More recently, research has found support for the inclusion of users of injection drugs, or their peers, in the development and provision of services, even though this has been a long-standing principle of health promotion programs. For instance, a key emphasis in the Canadian health reform movement has been to mobilize the community to take on more ownership for their health (World Health Organization, 1986). Strengthening community action recognizes the importance of communities taking responsibility for setting priorities and making decisions about issues that affect their health. With peer-driven approaches, messages are carried to the users by those who are familiar with the general group of people who inject drugs in the community. Peer-driven interventions have proven to be an effective mechanism for acquiring data from, or delivering services to, this difficult to reach population.

Peers can also play an important role in reaching a population that is critical to preventing the spread of HCV, namely, those who are at risk of engaging in injection drug use. There is evidence to suggest that individuals who are involved in injection drug use can intervene with potential initiates to reduce the adoption of injection practices (Hunt et al., 1998). An area worthy of further study is whether such an approach is feasible and effective in reaching those at risk of engaging in injection drug use in Canada.

A combination of outreach and peer-driven interventions appears to be a promising medium for reaching individuals engaging in injection drug use. Another potential approach is the mass media. Research from the United States and Australia has found individuals who engage in injection drug use to be similar to the general population in their consumption of media sources. The mass media also provides the potential for reaching individuals who are either contemplating injection drug use or are occasional users that are not on the streets. There is a need for an increased understanding of the media consumption patterns and information sources of users of injection drugs in Canada, however, before the potential benefits of using this medium can be assessed.

In developing communication strategies for users or potential users of injection drugs,

strategies that are similar to those utilized by marketing agencies in the advertising of a product for public consumption should be considered. With the target group being people who inject drugs or are at risk of injection drug use, the campaign needs to identify the groups' characteristics and determine where there are opportunities to intercede with a message. There are basically three questions that could form the basis of such a strategy:

- What is the public message that needs to be conveyed?
- What vehicle (medium) is best suited to address the issue (major/minor media sources and/or outreach/PDI workers)?
- How does the target group define themselves and what are their unique characteristics?

In a market driven environment, a test or focus group may be defined to ensure that the product's advertising is having the desired outcome. In the case of dealing with a public awareness communiqué, a focus group could ensure that the message is being interpreted appropriately, before general distribution. In developing an approach, special consideration needs to be given to cultural norms, ethnicity, gender, language barriers and reading comprehension (Pulley et al., 1996).

Finally, a theme of health promotion is to strengthen community action. Integrating this within the realm of other services to individuals who inject drugs will be a challenge due to the characteristics of persons who practice these high-risk behaviours. Changing society's views about this population is going to require a paradigm shift by politicians, law enforcement and the general public. Currently in Canada, support for harm reduction strategies and information dissemination to groups of injection drug users is varied. Service reorientation cannot take place in the absence of supportive policy changes, and policy will be supportive of the public's opinion, and so on. Taking action to minimize blood-borne infections through people who inject drugs will likely continue to pose policy makers with unique social, moral and organizational problems (Nutbeam et al., 1991).

Conclusion

Research indicates that outreach services, in conjunction with peer-driven interventions, offer the best success in reaching users of injection drugs. There is also evidence to suggest that the mass media (television, radio and newspapers) may offer a promising approach to reaching this population. The caveat is that most of the available information on mediums to reach IDU populations is based on responses from street populations or needle exchange participants and treatment clients. The extent to which these findings represent the general population of individuals involved in injection drug use is unknown. There is a need for greater clarification in our knowledge of the nature and characteristics of those who inject drugs in Canada, and the best mediums for reaching this group.

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