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Research paper

Uptake, benefits of and barriers to safer crack use kit (SCUK) distribution programmes in Victoria, Canada—A qualitative exploration

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ABSTRACT

Background: Crack use is prevalent amongst street drug users in Canadian cities, and associated with severe drug use, health and social problems. Whilst few targeted interventions are available for crack use, the common use and sharing of hazardous makeshift paraphernalia are a key concern, as these risks may be associated with oral injury and blood-borne virus (BBV) – e.g., hepatitis C virus (HCV) – transmission amongst users. Recently, distribution programmes of so-called 'safer crack use kits' (SCUKs) have been initiated in select Canadian cities, primarily to reduce the use of unsafe materials and paraphernalia sharing amongst crack users. This study explored uptake and benefits of, barriers to, and possible improvements to two recently implemented SCUK distribution programme in Victoria, Canada.
Methods: $N = 31$ regular crack smokers were recruited through community-based efforts between June and August 2010, and assessed via an interviewer-administered protocol involving quantitative and qualitative data items. Descriptive analyses were completed with the quantitative data, and thematic content analyses were conducted with the qualitative data in order to identify and extract prominent themes and issues.
Results: The sample indicated high levels of socio-economic marginalization, poly-substance use, health problems, lengthy crack use histories and common crack paraphernalia sharing. Most participants exclusively utilized the SCUK programme including glass-stems in addition to other paraphernalia materials. Participants described: lesser need to share – or to commit property crimes to obtain resources for – crack to paraphernalia, increased health awareness, and increased personal and community safety as benefits experienced from SCUK use. Limitations in SCUK resources and distribution, shortcomings in materials, and police interference were cited as barriers to current SCUK program delivery.
Conclusions: SCUK distribution in Victoria appears to result in a variety of individual and community health benefits. These benefits could be solidified by addressing current programme limitations, including better resourcing, expanding geographic distributions and eliminating police interference.

Background

Crack use is highly prevalent amongst street drug users in Canada, and has substantially increased in recent years (DeBeck et al., 2009; Fischer, Firestone Cruz, & Rehm, 2006; Fischer, Manzoni, & Rehm, 2006; Fischer, Rehm, et al., 2006; Haydon & Fischer, 2005; Health Canada, 2006; Werb et al., 2010). In a multi-site study of illicit opioid and other drug users across Canada, approximately half of the sample had used crack in the previous 30 days (Fischer, Firestone Cruz, et al., 2006; Fischer, Manzoni, et al., 2006; Fischer, Rehm, et al., 2006). Similarly, the most recent (2006) I-Track study assessing samples of injection drug users (IDUs) in multiple cities across Canada found 65.2% of participants had used crack in the previous 6 months, up from 52.2% in 2004 (Health Canada, 2004, 2006), whilst in a study of IDUs in Ottawa, 91% of participants reported smoking crack in the previous 6 months (Leonard et al., 2008). Similarly, in a study of street-involved drug users in Victoria, 87.8% of participants reported using crack in the previous 30 days (Ivsins et al., 2010). Crack is reported as the most commonly used drug in Vancouver (Boyd, Johnson, & Moffat, 2008; CHASE Project Team, 2005), and the 2006 I-Track study found

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Victoria crack use rates to be similar or higher compared to other cities across Canada (Health Canada, 2006).

Crack use is associated with unique and serious health and social problems. Users tend to be extremely marginalized within drug-using networks and broader society, and are characterized by severe poverty, homelessness, lack of access to legal income and other resources, and barriers to health care services (Cross, Johnson, Rees Davis, & James Liberty, 2001; DeBeck et al., 2007; Fischer & Coghlan, 2007; Harwick & Kershaw, 2003). Several Canadian studies found crack users to be homeless or unstably housed (Fischer, Firestone Cruz, et al., 2006; Fischer, Manzoni, et al., 2006; Fischer, Rehm, et al., 2006; Fischer et al., 2010; Leonard et al., 2008). Crack use is also associated with high levels of criminal involvement, arrests and imprisonment (Bennett & Holloway, 2008; Fischer et al., 2010; Manzoni, Brochu, Fischer, & Rehm, 2006).

Compared to other drug users, crack users are at elevated risk for a variety of health problems, including human immunodeficiency virus (HIV), hepatitis C virus (HCV) infection, and other blood-borne viruses (BBVs) and sexually transmitted infections (STIs) (DeBeck et al., 2009; DeHovitz et al., 1994; Fischer, Firestone Cruz, et al., 2006; Fischer, Manzoni, et al., 2006; Fischer, Rehm, et al., 2006; Maranda, Han, & Rainone, 2004; Wallace, Porter, Weiner, & Steinberg, 1997). Crack users frequently engage in high-risk sexual behaviour, such as having multiple sex partners, exchanging sex for drugs, infrequent use of condoms, and involvement in sex work; all of which are risk factors for transmission of BBVs or STIs (Atkinson, Williams, Timpson, & Schonnesson, 2010; Booth, Watters, & Chitwood, 1993; Harzke, Williams, & Bowen, 2009; Schonnesson et al., 2008). Crack use is also associated with mental and emotional health issues such as depression (Schonnesson, Williams, Atkinson, & Timpson, 2009).

Recent research with crack user populations identified two population specific health risk behaviours. First, users frequently use crack pipes made from hazardous makeshift materials, including glass fragments or metal pipes/tubing, aluminium cans, plastic medicinal inhalers, car antenna or glass ginseng bottles, all of which can cause cuts, sores, burns and blisters and chronic injuries in and around the user's oral cavity (Faruque et al., 1996; Porter & Bonilla, 1993; Porter, Bonilla, & Drucker, 1997; Shannon et al., 2008). Secondly, users commonly share crack use paraphernalia (Collins et al., 2005; Fischer et al., 2010; Haydon & Fischer, 2005; Shannon et al., 2006, 2008). A recent study of crack use in mid-sized BC communities found that 80% of participants reported sharing crack pipes in the previous 30 days (Fischer et al., 2010). Data from a crack user cohort in Ottawa found that 72% of participants reported sharing crack pipes in the previous six months, whilst 90% reported sharing a pipe in the one month prior to the assessment (Leonard et al., 2008). Amongst a sample of Vancouver crack smokers, 80% reported sharing pipes or mouthpieces (Malchy, Bungay, & Johnson, 2008).

Sharing crack use paraphernalia has been hypothesized to potentially facilitate BBV transmission amongst users. Several studies have found crack users – including samples with no injecting history – to feature substantially elevated BBV rates, specifically for HCV (McMahon & Tortu, 2003; Marcias et al., 2008; Roy et al., 2001; Tortu, Neaigus, McMahon, & Hagen, 2001) leading to the hypothesis that the sharing of crack use paraphernalia in combination with oral injuries, may be a possible pathway of HCV transmission amongst crack users (Scheinmann et al., 2007; Tortu, McMahon, Pouget, & Hamid, 2004). Indeed, a recent study examining the presence of the HCV on crack pipes suggested that HCV transmission by way of crack paraphernalia sharing may be possible (Fischer, Powis, Firestone Cruz, Rudzinski, & Rehm, 2008). Given that HCV is several times more infective than HIV via blood contact, and the high rates of HCV amongst crack using populations, this is of particular concern (Sulkowski & Thomas, 2003).

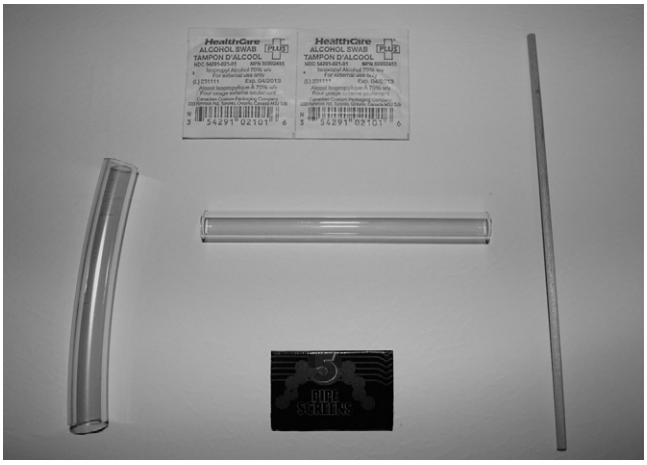

Fig. 1. Content material of a 'safer crack use kit'.

Despite the prevalence of crack use and related health and social problems, few drug intervention programmes exist in Canada tailored for crack users (Boyd et al., 2008; Fischer & Coghlan, 2007; Bungay, Johnson, Varcoe, & Boyd, 2010). In Europe, several countries offer 'safer inhalation facilities' rooms for crack users, although proposals for such facilities have been rejected in Canada to date (EMCDDA, 2007; Fischer & Allard, 2007; Shannon et al., 2006). In contrast, the distribution of 'safer crack use kits' (SCUK) to crack users is a more easily feasible initiative due to light resource requirements and flexible delivery options, and has been implemented in a select few cities across Canada in recent years (Haydon & Fischer, 2005). Similar to sterile needle exchange/distribution for injection drug users, SCUK distribution is a secondary prevention measure aimed at providing safer crack use paraphernalia [i.e., borosilicate (e.g., Pyrex) glass stems, rubber mouthpieces, brass screens] to allow users to assemble their own pipes as a means of reducing unsafe paraphernalia use and sharing. Whilst SCUK programmes in Ottawa, Ontario and Nanaimo, British Columbia (BC), were temporarily suspended due to political opposition, SCUKs have been distributed in Victoria, BC since 2007 (James, 2007; O'Byrne & Holmes, 2008). Figs. 1 and 2 present illustrations of a SCUK and its constituent parts.

Crack use paraphernalia distribution in Victoria, BC

SCUK programme delivery in Victoria happens in a distinct wider programme and policy context. Formally – based on the

Fig. 2. Glass-stem crack pipe with filter.

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Downtown Health Initiative Plan Action Plan – Victoria subscribes to a 'Four Pillars' approach to street drug use – consisting of an "overarching goal of ... harm reduction" as well as prevention, treatment and enforcement – jointly developed, implemented by the City of Victoria, the local Vancouver Island Health Authority (VIHA) and the Victoria Police Department (City of Victoria, 2004). Most services to street drug users are delivered by local health and social service agencies which receive targeted funding from VIHA. Both local services as well institutional politics related to street drug use have been experiencing severe disruptions and strain over the past two years, since Victoria's only fixed needle exchange service – run by AVI – was shut down in late 2008 due to local business and neighbourhood pressures (MacNeil & Pauly, 2010). Since then, the VIHA and the City have failed to identify a new location for the fixed NEP, and local police – under a new police chief and in the context of a new mayor – have conducted more aggressive law enforcement and policing against street drug users. The delivery and distribution of public health services and materials to street drug users in Victoria has further been constrained by the fact that services are restricted by "no-service-areas", i.e. to not include areas in front of residences, open business, schools or daycares. This restriction is commonly referred to as the existence of "no-go-zones" by some local service providers.

Currently, two distinct SCUK initiatives operate in Victoria. The first SCUK (referred to as 'SCUK-sans-stem' from here-on in) is a programme that includes rubber mouthpieces and pushsticks, but no glass stem centrepieces. The idea behind this approach is that crack users will use the rubber mouthpieces provided on existing glass stems or makeshift material pipes from other sources in their or others' possession, and hence reduce direct contact or exposure to the pipe material. The materials for the SCUK-sans-stem programme are provided by the BC Centre for Disease Control's (BCCDC) Provincial Harm Reduction Program and disseminated by a variety of social/health service agencies in Victoria receiving operational funds from VIHA, including the Society for Living Intravenous Drug Users (SOLID), PEERS Victoria Resource Society (an organization providing support for former and current sex workers), Cool Aid Society street nurses, and Vancouver Island Health Authority (VIHA) street nurses. Based on community sources, the SCUK-sans-stem programme was expected to distribute about 600–1000 SCUK units per week upon implementation in 2009.

The second SCUK initiative – implemented by AIDS Vancouver Island (AVI) through their Street Outreach Services (SOS) – has operated in Victoria since 2007. In addition to mouthpieces and push sticks contained in the VIHA funded programme, the AVI-SCUK programme includes glass stems, brass screens, and health information. However, due to funding limitations, AVI's ability to distribute pipes in their SCUKs is severely limited to only 300–400 units per week, distributed via its bicycle and mobile van-based SOS programme.

The primary objectives of this study were – in an exploratory approach – to examine, assess and compare the uptake, potential benefits and barriers, and changes in crack users' risk behaviour associated with the two SCUK distribution programmes.

Methods

Between June and August 2010, interviews were conducted with a sample of 31 regular crack users in Victoria, BC. Study participants were recruited with assistance by street outreach workers from three sites in Victoria: in and around a daytime drop-in centre (Our Place), in an evening drop-in centre/homeless shelter (Streetlink), and from a mobile outreach van. This approach allowed access to a cross-representation of crack users, with differing use environments and access to services.

Targeted sampling methods were used to recruit potential participants especially representing potentially diverse crack user sub-populations existent in Victoria (Watters & Biernacki, 1989). In order to be eligible, prospective participants had to be: (1) at least 19 years old, (2) regular crack users (defined as having used crack on at least half of the past 30 days), (3) using crack for at least the previous 6 months, (4) willing and able to participate in the study protocol and, (5) not severely intoxicated at the time of the interview. After eligibility screening and obtaining consent, eligible participants were interviewed in a private location at either of the three study sites. Interviews followed a structured questionnaire designed to collect quantitative data on participant socio-demographics, recent drug use, health risk behaviours, social and health service utilization, and crack paraphernalia use, and indicated a digitally audio-recorded open-ended semi-structured interview to collect qualitative data on the benefits of and barriers to accessing SCUKs, reasons for sharing crack pipes, and ways to improve the current SCUK distribution programmes (Creswell, 2003). Interviews lasted between 30 and 45 min, and participants received a $20 honorarium for their time. The study was approved by the investigators' respective institutional Research Ethics Boards.

Quantitative data were entered into an Excel based databank, and simple descriptive statistics were computed. Interviews were transcribed, reviewed, and coded based on several layers of content analysis (Robson, 2002). In keeping with the exploratory approach of the present study, qualitative analyses were conducted in two stages of coding. The first stage involved line-by-line coding to highlight meaningful incidents, actions, events and interactions at the level of participant description. Similar codes were then grouped together as common or recurring concepts or units of data. A second stage of coding involved grouping concepts thematically, inductively centring on and resulting in the main topical areas of (1) uptake of SCUKs, (2) benefits of SCUK distribution, (3) barriers to accessing SCUKs and, (4) ways of improving current SCUK distribution. Codes were examined both within and across all themes, and compared for similarities and differences. From this, a range of major themes were identified and organized by topical area. Illustrative quotes were extracted based on prominent emergent themes.

Results

Sample characteristics

Table 1 presents select key socio-economic, drug use, health and crack use characteristics of the sample. The study sample (16 males and 15 females) aged 22–60 years were homeless or characterized by unstable housing (70.9%) and relied on income assistance (80.6%) or drug dealing (58.1%) for income generation. The majority were arrested in the past year (58.1%) and currently under judicial restraint (87.1%). About half self-reported 'fair' or 'poor' physical health (51.6%) and HCV positive status (54.8%). The majority used heroin (64.5%), had injected drugs (67.7%) in the past month, had used crack for at least 10 years, and had shared crack use paraphernalia in the past 30 days (77.4%). Overall, the sample presented indicators of high socio-economic marginalization, intensive criminal justice involvement, poor physical health with a high prevalence of BBV, use of a variety of both injection and non-injection drugs, and high levels of crack paraphernalia sharing.

Uptake of SCUKs

All study participants reported obtaining SCUKs from the AVI programme, except one who did not receive harm reduction materials from any Victoria organization. Whilst other (VIHA-funded)

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Table 1
Key characteristics of study sample $N = 31$, N (%).

Socio-demographics	
Sex (male)	16 (51.6)
Age	Mean: 39.8, median: 39, SD: 9.36, range: 22–60
Unstable housing in the past 30 days	22 (70.9)
Arrested in past year	18 (58.1)
Health	
Good or excellent physical health status ($N = 29$)	18 (62.1)
HIV positive (self-report)	5 (16.1)
HCV positive (self-report)	17 (54.8)
Oral sores presenting the past 30 days	8 (25.8)
Crack and other drug use	
Injected drugs in the past 30 days	21 (67.7)
Length of crack use (in years)	Mean: 12.1, median: 10.0, SD: 8.1, range: 0.7–28.0
Shared crack paraphernalia in the past 30 days	24 (77.4)
Number of crack paraphernalia sharing episodes in the past 30 days ($N = 24$)	Mean: 4.46, median: 4.5, SD:1.69, range: 2–7

SCUK distribution programmes operate in Victoria (as described above), most participants (25 of 31) only obtained SCUKs from the AVI programme and were not even aware of the existence of the other programmes. The majority of participants who were aware of them described dissatisfaction with them, as they did not include the pipe stems or centrepieces. One participant described her experience receiving a non-AVI SCUK:

> "I've gotten one of those before. And then I got it and there was no pipe. There was everything but. To be honest I was really pissed off." (SCUK29, F, 39)

Only one participant preferred SCUKs from another organization (SOLID) because they provided pre-burnt Brillo as the filter material for the pipe.

Benefits of SCUKs

Three distinct areas of benefits of SCUK distribution emerged from the interviews, namely health, economic and social benefits.

Health benefits

The vast majority of participants saw and experienced health benefits related to SCUK distribution, particularly the reduced need for crack paraphernalia sharing. Participants were aware of the potential health risks related to sharing pipes with others and to the health benefits of SCUK distribution in terms of limiting the potential spread of disease. One participant described the positive impact she believed SCUK distribution had on her health, stating:

> "I don't get sick. When I was using other people's pipes and stuff I noticed I got a lot more colds, flues, and stuff like that. Staph infections. It's a good thing, definitely." (SCUK04, F, 40)

Similar responses revealed that the educational efforts of front-line health service providers whilst disseminating SCUKs had informed clients of the possible health risks of pipe sharing. Many participants were cognizant of the potential for spreading disease by sharing crack pipes and saw SCUKs as an opportunity to lower these risks.

> "It's keeping me clean from getting HepC, and any other mouth diseases you can get from sharing. . .It's like peace-of-mind for me. You know, I don't have to be concerned about me getting anything from anybody else. 'Cause they [crack pipes] are available, rather than sharing or trying to use other people's." (SCUK13, F, 44)

> "Getting a new pipe. . .saves me from lowering my standards and borrowing one off a stranger or a street person that could have herpes, or HIV, or a cut lip or something like that." (SCUK30, M, 43)

A further health benefit of SCUK distribution perceived by respondents was that the programmes limited the need to use makeshift or broken items as crack paraphernalia, thus reducing the chances of cutting their lips on sharp metal edges (i.e., on aluminium soda/beer cans) or chipped edges of glass pipes. One participant described how he smoked crack before SCUK distribution:

> "Before this I tended to end up using tiny little shards of glass or pop cans." (SCUK19, M, 29)

Other participants expressed the benefits from having less hazardous paraphernalia materials available.

> "You're not ending up using a pipe or some other foreign object that you found on the side of the road." (SCUK21, F, 48)

> "You always have a proper pipe to use, and not sharing cracked pipes and broken pipes. Not using little broken ends of pipes you found on the ground." (SCUK02, F, 28)

Economic benefits

Several participants spoke about the economic benefits of SCUK distribution, specifically the ability to save money by not having to buy crack pipes from stores or other users. Hardware parts diverted to and used in the assembly of makeshift crack pipes are sold in a number of street-level stores (e.g., dollar or corner stores) in downtown Victoria, ranging in price from $3 for thin glass pipes, up to $10 for metal, thicker glass, or Pyrex pipes. Both used and clean makeshift pipes are also sold on the street by other users, priced anywhere from $5 up to $20.

> "Saving money, by not having to spend ten dollars to buy a pipe everyday. . .Which cuts down on my having to [do sex] work, which is a good thing." (SCUK02, F, 28)

> "Not paying for it. It's free. It's always free. . .it saves me money everyday!" (SCUK03, M, 44)

Another participant, who was involved in sex work, described how the SCUK distribution from the outreach van benefits her economically, stating,

> "I don't have to go away from where I'm working to get a pipe. I don't have to spend money on a pipe. . .The biggest benefit is that [the outreach distributions] right down where I need to make my money." (SCUK15, F, 30)

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Social benefits

Participants identified a variety of social benefits of SCUK distribution both to the crack user community and the general public. For example, a number of participants spoke about being involved in, or witnessing, less petty crime – such as breaking into cars for loose change (to buy pipes) or stealing car antennas to make pipes – as a consequence of SCUKs distribution. As one participant explained,

> "Cause they're available you're not out there trying to steal something to make a pipe out of." (SCUK16, M, 43)

Similarly, some participants saw the – somewhat secluded – location of the evening SCUK distribution from the outreach van as benefiting the general public by keeping interactions between service providers and crack user clients out of public view. Keeping their activities discrete – especially from children – was particularly important for some users.

Finally, a number of participants described reductions in negative social interactions with other crack users around crack pipes, e.g. verbal arguments and physical violence, as a positive social impact of SCUK distribution. One participant stated,

> "It helps me not have to argue with somebody about giving me their fucking pipe." (SCUK06, F, 35)

Other participants illustrated the lack of pipes leading to physical violence:

> "They stop not just the spread of disease, but the spread of violence. People beating up other people for their wares. . .There are fights for gear [crack pipes] cause there is just not enough of it." (SCUK26, M, 32)

> "A crack pipe is a weird thing in the crack world. Crack pipes are such a personal thing, with crack people, they will fight over it. And if there's lack of one, it causes fights." (SCUK27, M, 50)

Barriers to SCUK distribution

Two main themes emerged regarding problems participants had with the current SCUK distribution programme: difficulty accessing SCUKs and police interference.

Difficulty accessing SCUKs

The vast majority of participants reported difficulty accessing SCUKs as a result of SOS' limited operations in terms of times and space. Participants commonly described problems finding the afternoon/evening mobile outreach workers, or spoke of the limited hours of the outreach van, and thus were unable to acquire SCUKs when needed. As one participant succinctly stated of trying to obtain SCUKs, "It's just a hit and miss thing" (SCUK17, F, 60). Similar experiences were recounted by many other participants.

> "Just missing them. Sometimes I don't get out there on time. Like they usually come around 3:00. But you gotta catch them within that fifteen-minute window or else you miss them. . .The [outreach] people walking around is very hit-and-miss. Like you never know where they're gonna be." (SCUK08, M, 38)

> "They are not always available because they no longer have an actual place. The van can only be out here, you know, certain times. . .People don't always catch them when they're riding around on their bikes." (SCUK04, F, 40)

Lack of SCUK supplies was another problematic issue frequently described by participants. Encountering the street outreach team or van, only to be told all available pipes had already been distributed was a common experience.

> "By the time you get to the van usually they'll run out. That's one problem, they seem to run out of pipes pretty quick." (SCUK08, M, 38)

> "A lot of the times you come here you don't get one because they only give out, what, ten [SCUKs] a day. I don't know how many they give out, not many. So if you're not here right, first-come first-served, you don't get one." (SCUK28, M, 42)

Not surprisingly, a great number of participants spoke of the impact of the 'no-go zone' in downtown Victoria (as described above) preventing them from readily accessing SCUKs. Restrictions on handing out public health materials in an area where many high-risk users are located were perceived as a critically problematic barrier to SCUK access:

> "One of the problems I run into here, in Victoria, is the red zone. The no-go zone. The [street outreach team] are somewhat restricted as to where they can go. And unfortunately the restricted area is basically the area where everybody hangs out." (SCUK11, M, 53)

> "Certain places they can't give them out. You have to follow them or walk with them. That is another pain in the ass, because there's certain places where we can't go either, because of red zones. . .It's kind of a downfall for us when we have to follow them certain places. Or some of us are actually sick, or we've got 'street-feet', you know some of us can't walk that far." (SCUK18, F, 46)

Police interference

Just under half of participants spoke about having their crack pipes confiscated or broken by police. Some participants also described a sense of trepidation about carrying pipes with them, since not being in possession of drug use paraphernalia was part of a bail or probation order for some. Several participants described police interference, and its perceived detrimental impact on the aims behind the SCUK programme:

> "It really bugs me when the cops sit there and they smash your pipes. They crush them on the sidewalk. It's stupid. Why would you go and crush their pipes when. . .it's supposed to be for us to be safer. And yet they're crushing them, and then we have to go and share somebody else's once we don't have [a pipe] anymore. . .it happens all the time." (SCUK18, F, 46)

> "Every time the cops, they just come along and squish [the crack pipe] and smash it. So it's defeating the purpose, because somewhere this must be costing somebody something to come up with the pipes to give us. And then they just come along and smash them and we're back to square one." (SCUK21, F, 48)

> "Any paraphernalia that's on us whatsoever gets taken away by the cops. That should right there be mandated. Right away. Because that paraphernalia is nothing but a safety measure. They're taking away a safety measure. And when they take it away they introduce a hazard." (SCUK26, M, 32)

Possible improvements to SCUK distribution

Participants described two main themes on ways in which the current SCUK distribution programme could be improved: chang-

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ing specific content items in the SCUKs, and enhancing outreach and access features of the AVI programme.

Improving SCUK programming

The SCUKs distributed by AVI as used by all but one respondent contain a glass stem, wooden push-stick, brass screens, and a mouthpiece. The vast majority of participants complained about the brass screens included in the AVI SCUKs, preferring to use Brillo. When asked how SCUKs could be improved, one participant replied simply, "I don't like the screens and I want Brillo. Straight up." (SCUK15, F, 30). This sentiment was shared by most participants. As many explained, the brass screens provided are hard or impossible to use and thus commonly discarded.

> "Put Brillo instead of screens, 'cause nobody uses the screens. So really you're just wasting money on getting them. Everyone's just throwing them out. And hand out Brillo. Which is something that people are always in need of." (SCUK20, F, 28)

> "Realistically, we use Brillo. I do understand. . .that it isn't healthy. But neither is crack. And nobody uses [brass] screens. Hardly anybody. So why you don't just put Brillo in there I don't know. . .Like why not just give people the choice. Put in both. Brillo is so cheap. Pre-burn it, like SOLID do." (SCUK17, F, 60)

Though not as broadly disliked as the brass screens, many participants suggested SCUKs should include better-quality pipe stems or centrepieces, made from stronger glass, Pyrex, or even metal. Whilst current SCUK distribution was seen as limiting the need to use broken glass pipes, a number of participants nonetheless reported regularly breaking or chipping the pipes they received in the SCUKs.

> "Having pyrex pipes instead of glass ones, cause then they wouldn't break so easily. They're more durable and last longer. 'Cause they don't break easily, then people aren't using broken pipes as much." (SCUK20, F, 28)

> "I wish that AVI went with the Pyrex. For sure, cause if you drop it once it's cracked. Everyone at Streetlink has one like this [a broken glass pipe]. I broke mine, I forgot about it, I put my hand in my back pocket and just about took the tip of my finger off. They break very easy." (SCUK30, M, 43)

Improving SCUK distribution

A variety of improvements to SCUK distribution were suggested by participants, including distribution by peers (to increase distribution contact points and coverage), increasing the hours of distribution, and ways to connect with users and distribute SCUK materials that are less publicly visible (e.g., not in the middle of busy streets). Participants most commonly suggested that larger quantities of SCUKs need to be available so that demand can be met. As one participant concisely stated: "They need more pipes. That's about all." (SCUK12, F, 38).

> "They only have so many [pipes] they can hand out. And then once they're at their limit they can't hand any more out. And there's lots of people being left out. . .Just more pipes. They probably need more funding for that." (SCUK04, F, 40)

Similarly, participants suggested AVI-SOS increase both their hours of operation and spatial reach/spread across different areas of downtown Victoria.

> "If [SOS] did two runs a day. Cause over up at [drop-in centre], on Pandora [Street] there, they are basically at 3:30 everyday. And if you miss it, you don't get it until the next day. So if they had it at 3:30 and 7:30 it would be more convenient for other people." (SCUK05, M, 37)

> "The one downside of the outreach team. . .is that it is comprised of just a few people. And this is just not enough. It's gotta have tentacles. . .you need 5 or so more outreach vans out there, on all hours of the night, fanning through the city. We're just too many people out there, and we need you guys a lot more." (SCUK26, M, 32)

Of particular importance to a number of participants was the absence of a fixed distribution SCUK, e.g. as part of a fixed needle exchange services (NES) site, as the only such site in Victoria was closed in May 2008. SCUK distribution from a fixed NES or other sites, in the eyes of several participants, would solve a number of the problems regarding access to SCUKs and other safer drug use materials distribution.

> "If we had a physical place, an actual physical site that we could go to, that would alleviate pretty well all the barriers that could arise. Because even someone like me, who has got social issues, can make it out there sooner or later, whenever you're feeling better. But now I've got that barrier, along with the barrier of trying to be able to get [to SOS] first." (SCUK19, M, 29)

Discussion

This study examined the uptake, and potential benefits, barriers, and improvements of two recently initiated SCUK programmes in Victoria, BC, on the basis of interviews with a small sample of regular street-entrenched crack users. SCUKs are a relatively recent – and still controversial – intervention for the high-risk, marginalized and growing population of crack users in Canada (Haydon & Fischer, 2005; O'Byrne & Holmes, 2008). The key aims of SCUK delivery are to reduce crack users' sharing of makeshift crack paraphernalia and thus to reduce the risks of oral injury and thus potential HCV transmission, and generally to facilitate outreach efforts to the target population (Boyd et al., 2008; Fischer & Coghlan, 2007). Currently, only a few SCUK programmes are available in Canadian cities, and outcome research to date has been rather limited (Fischer et al., 2010; Leonard et al., 2008).

A first basic finding of our study is that our sample reflects the high degree of social marginalization (e.g., high prevalence of unstable housing, high crime involvement), poly-substance use, and multiple health problems found for crack users in other studies (Cross et al., 2001; DeBeck et al., 2007, 2009; DeHovitz et al., 1994; Fischer, Firestone Cruz, et al., 2006; Fischer, Manzoni, et al., 2006; Fischer, Rehm, et al., 2006; Fischer & Coghlan, 2007; Harwick & Kershaw, 2003; Maranda et al., 2004; Wallace et al., 1997). In regard to the two SCUK programmes under examination, an initial observation is that the SCUK-sans-stem programme remained virtually unrecognized and hence rather underutilized by our sample. It appears that the absence of crack pipe stems was a primary factor, and the limited knowledge about this programme was a secondary factor for the programme's limited utilization. Utilization of the programme could be different outside our particular sample, although our study relied on targeted sampling methods towards assembling a cross-sectionally diverse sample of crack users. Further investigation needs to examine to which extent the SCUK-sans-stem programme is utilized at all, who utilizes it, and how its users are different from the individuals captured by our study sample. These insights on utilization should be helpful especially to the health service provider organizations behind this

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programme, i.e. the BC Provincial Harm Reduction Program and VIHA, towards considering design and delivery improvements to their current SCUK programming efforts for high-risk crack users.

Most respondents in our sample regularly utilized and preferred the AVI-SCUK programme initiative including glass stem centrepieces, and illustrated multiple benefits of SCUKs. Overall, our data provide substantive evidence that users perceived a diverse range of significant benefits from SCUKs in health, social and economic realms. First and foremost, whilst the biological plausibility and epidemiological extent of the contributions of crack pipe sharing to actual BBV transmission is tentatively documented (DeBeck et al., 2009; Scheinmann et al., 2007; Fischer et al., 2008) our study participants clearly believed that the use of SCUK reduced users' risk for oral cuts and burns as well as exposure to other disease pathogens, and improved their awareness about and responsiveness to disease risks conveyed by educational interventions forming part of the SCUK distribution (e.g., information from outreach workers). These ancillary benefits for crack users are not trivial, and appear to make SCUKs a worthwhile public health outreach and educational intervention even in the possible absence of their demonstrable ability to effectively prevent actual BBV transmission.

Yet beyond the increased ability for users to have their own crack pipes available, and the reduced need to share pipes, SCUKs also generated other important benefits perceived by the target population, some of which may be somewhat unexpected. Specifically, respondents provided testimony suggesting how the distribution of SCUKs increased the availability of crack use paraphernalia, and hence potentially reduced dynamics leading to interpersonal aggression or violence over rare but needed crack paraphernalia, or the need to commit property crimes to obtain funds or materials in order to procure crack paraphernalia (Inciardi & Surratt, 2001; Surratt, Inciardi, Kurtz, & Kiley, 2004) These effects – as limited as they may be in the grand scheme of things – are noteworthy and perhaps a critical stand-alone benefits of SCUK distribution.

As is well documented in the literature, crack use environments as well as markets have been characterized by high degrees of volatility as well as interpersonal violence, causing considerable harms to individual users as well as the communities in which they are located (Bowling, 1999; Baumer, 1994; Valdez, Kaplan, & Curtis, 2007). Several studies have described both the prevalent exposure of crack users to violence – much of which is amplified by gendered dynamics of violence, e.g. by way of women's forced involvement in high-risk sex-trade activities in the context of crack use – as well as the extensive toll of violence and crimes on urban communities where crack use is prevalent (Edlin et al., 1994; Jones et al., 1998; Surratt et al., 2004). If indeed SCUK distribution help to even just slightly reduce the prevalence of interpersonal violence, aggression and other crimes associated with the dynamics of crack use – and this should be a focus of future systematic studies – SCUKs would function as both a valuable individual and community health intervention. On this basis, SCUK would deserve to be supported by authorities concerned with crime prevention or public order as a *bona fide* personal and community safety intervention. Moreover, the experienced benefits of SCUK are diverse, ample and substantial – and come at comparably minimal actual costs and little, if any apparent downsides or problems. To be concrete: the material value of a SCUK unit is <$1, the overall costs of implementing SCUK programming amounts to no more than a few $1000 in material costs, and distribution occurs in the context of existing outreach infrastructure – all of which is miniscule in comparison to the costs of processing even just a few criminal arrests or charges.

In examining barriers to SCUK dissemination, several key findings emerged. First, several participants described extensive frustration about ongoing active efforts by police to seize and destroy crack use paraphernalia, thereby actively interfering with or eliminating the potential benefits of the SCUK measures described. Whilst it is not clear what police realistically intend or expect to accomplish by such interventions, these illustrate the fallacies of ongoing drug prohibition on the ground which have been demonstrated to be detrimental to users' health and safety as well as to fuel local violence in and other harms to communities (Kerr, Small, & Wood, 2005; Maher & Dixon, 1999; Small, Rhodes, Wood, & Kerr, 2007). Studies have documented how active police interference with public health measures like NES have contributed to risky drug use behaviours (e.g., needle sharing, use in unsafe places), violence and aggression related to paraphernalia access as well as displacement of disorder and crime – these costly lessons should not require repeating for SCUK interventions (Davis, Burris, Kraut-Becher, Lynch, & Metzger, 2005; Rhodes, 2002; Rhodes et al., 2003; Small et al., 2007).

Furthermore, the juxtaposed efforts of different public agencies unfortunately also document to what extent the ideas of supposedly concerted or constructive local drug strategies ('Four Pillars') or "coordinated harm reduction programming" under municipal umbrellas remain a practical illusion in operational practice (City of Victoria, 2004; Fischer, 2003; Werb et al., 2008). The nature and goals of interventions towards drug use by the realms of enforcement and public health are based on categorically different assumptions in key respects (Aitken, Higgs, Kelsall, & Kerger, 2002; Fischer, 2003; Maher & Dixon, 1999). However, key municipal policy authorities in the specific context of our study should be able to demonstrate sufficiently sensible insights and leadership to ensure that public health measures like SCUK are not actively hindered or undermined by law enforcement. For example, the key health authorities behind SCUK – supported by the Provincial Health Officer and the Victoria Municipal Government – could declare SCUK dissemination an essential public health service, and request – for example, via the local police services board overseeing police operations – that law enforcement personnel do not interfere with SCUK distribution or the possession of SCUK paraphernalia by crack users.

The issue of 'no-service-areas' in downtown Victoria – in which SCUK or other safer drug use materials can allegedly not be distributed – poses similar challenges. Victoria is a major tourist destination keen to uphold its pristine image to outside visitors as well as an urban environment characterized by a core of predominantly middle-class residents and business owners not keen on street drug users or health services catering to them disturbing their lifestyles and livelihoods. As our data suggest, the existence of the 'no-service-areas' appear to hinder distribution of SCUK for some users keen but unable to utilize the SCUK services and instead are likely continue to engage in higher-risk use behaviours without them.

The situation illustrates an all too familiar dilemma in public health programming for street drug users: it is well documented that in order to be most effective, ground-level interventions need to be offered as closely to users' places of use and practical needs. Yet at the same time, it is understandable that such interventions cannot occur universally and everywhere, and there is an inherent systemic dynamic to push street drug users to the margins of and minimize the presence of their deviant behaviour or disturbing impact on 'decent' social life or spaces (Dovey, Fitzgerald, & Choi, 2001; Fischer & Poland, 1998; Tempalski et al., 2007). These tensions can lead to unsatisfactory realities or outcomes of interventions aiming at marginalized populations, as illustrated in this present SCUK case study. If the provision of effective public health interventions for crack users in Victoria is a sincere objective, these may need to accept the lessons of and requirements for institutionalising 'safer use environments' rather than just disseminating safe use materials in the long run. This may require, for example, establishing safer crack use facilities, aiming to protect both the health of crack users as well as to minimize harms on sur-

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rounding communities (Rhodes, 2002; Rhodes et al., 2006). The implementation of safer environments for crack users may hence serve both sides or interests constructively, and such propositions are not new in Victoria: a feasibility study to examine the establishment of 'supervised drug use facilities' in Victoria included explicit recommendations for safer crack smoking facility components, yet was never acted on by authorities (Fischer & Allard, 2007). These proposals may need to be urgently revisited and reconsidered.

As documented by our data, there is clearly room for intrinsic improvements of SCUK programming. Most simply, current SCUK efforts are substantively hindered by limited supply resources, leaving many users without access to SCUKs when sought or needed. These shortages could easily be addressed by small additions of funding to the current main SCUK provider (e.g., AVI) or by BCCDC/VIHA providing key SCUK components – specifically: glass stem centrepieces – with the current SCUK-sans-stem programme. It would be easily and with minimal cost possible to provide all crack users in Victoria – for the reasons and benefits described above – with SCUKs who seek these materials. This standard is in place for NES across Canada and elsewhere, and should be no different for SCUKs (Des-Jarlais, 2000; Strike et al., 2006; Wodak & Cooney, 2006). Both the City of Victoria and the local health authority, VIHA – ideally with the support of the BC Provincial Harm Reduction Program – could easily facilitate such service improvements. Study respondents also clearly stated that they preferred 'Brillo' over brass material for screens included in SCUKs. Whilst there have been health concerns regarding the former, current SCUK distribution by AVI have made according material adjustments. Finally, our data also provide further evidence for the acute need for the (re-)establishment of a fixed NES-site in Victoria, through which SCUKs could also be more reliably distributed. The closure of the Victoria fixed NES has brought detrimental consequences for public health service delivery to the sizeable IDU population in Victoria, and currently also hinders more effective SCUK distribution (Ivsins et al., 2010; MacNeil & Pauly, 2010).

Our study has some important limitations. It relied on a select, non-random sample which may represent selective views and experiences, and data can thus not be generalized to the general crack user population in Victoria or elsewhere. Our data also rest in narrative and subjective experiences and perceptions from study participants which were analysed and interpreted by the researchers, with potential limitations for intrinsic and extrinsic validity.

Importantly, this exploratory qualitative study has documented important dynamics of uptake and impact of, and potential improvements for SCUK dissemination for crack users in Victoria. SCUK distribution appears to result in a variety of tangible benefits for users, which are particularly valuable in the absence of other solidly effective and presently available targeted health interventions for crack users. The data provided should help local service providers guide programme planning and delivery. For future and long-term programming and policy decisions regarding SCUK – also on a more pan-Canadian level – more systematic and comprehensive studies are needed, including controlled observational studies of the impacts of SCUKs for users and communities.

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Conflict of interest

All authors declare that they have no conflicts of interest.

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