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Law enforcement influences on HIV prevention for injection drug users: Observations from a cross-border project in China and Vietnam

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Abstract

Law enforcement activity has had multiple influences on injection drug users' (IDUs') participation in a cross-border HIV prevention project in southern China and northern Vietnam. The project has successfully achieved and maintained the official support of police and other government agencies and effectively implemented its interventions. However, analysis of process data, site visit observations, and interviews with project staff, peer educators, IDUs, and police officers reveal the ongoing effects of actual and perceived threats from law enforcement, as well as community stigmatisation, on IDUs' project participation. These effects are discernible in variations in the monthly numbers of needles/syringes provided, cross-border differences in IDUs' preferred ways to receive new needles/syringes and retain used needles/syringes for exchange, and geographic patterns of IDUs' receiving and redeeming pharmacy vouchers. HIV prevention programmes must not only maintain the support of police and other officials but also convince IDUs that it is both beneficial and safe for them to participate in the interventions. Programmes must also be implemented with flexibility, adapting to the potentially changeable preferences, perceptions, and needs of IDUs.

Keywords: IDUs; HIV prevention; Harm reduction; Police

Background

In some areas of southern China and neighbouring northern Vietnam, HIV prevalence rates among injection drug users (IDUs) have reached 60–70% (China State Council and AIDS Working Committee Office, 2004; Chu et al., 2000; van Ameijden et al., 1999; Hien, Long, & Huan, 2003; Nguyen, Hoang, Pham, & Detels, 2001; Dondero et al., 2000;

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UNAIDS, 2000). Injection drug use is particularly prevalent in border areas and among poor, unemployed, and ethnic minority people.

Multi-sectoral collaboration and the active support and cooperation of diverse stakeholders including political leaders and police, as well as the general community, are critical to the success of HIV prevention programmes for IDUs, particularly those involving needle/syringe exchange, pharmacy sales of needles/syringes, and peer education.

Participation in such programmes may expose IDUs to law enforcement action, community stigmatisation, and other risks. Thus, law enforcement action, the threat of such action, or even drug users' misperceptions of their own levels of risk can have very negative effects on participation in interventions (Bluthenthal, Kral, Lorvick, & Watters, 1997). A study of the negative effects of actual and perceived law enforcement actions on HIV prevention programmes for drug users in California identified three major ways in which such negative influences operate: (i) fear of arrest for possession of needles/syringes reduces drug users' participation in needle/syringe exchange programmes, thus increasing sharing of injection equipment and other unsafe behaviours; (ii) arrest of needle/syringe programme volunteers reduces coverage of the target populations of IDUs and the number of needles/syringes distributed; and (iii) fear of arrest discourages the summoning of emergency medical services in cases of drug overdose (Kral & Bluthenthal, 2004). Reports from a number of countries, including Indonesia, Russia, Canada, and the U.S., indicate that IDUs' fear of arrest makes them reluctant to carry needles/syringes (Bluthenthal et al., 2004; Lemouchoux & Effendy, 2004; Lowndes et al., 2003; Kerr et al., 2004).

The formal legal environment, management policies of and training provided by law enforcement agencies, and actual 'street-level' practices of law enforcement officers materially affect drug users' attitudes and behaviours. Day-to-day law enforcement practices may or may not be strictly consistent with the laws 'on the books' or even with policies and directives from local police leadership. Moreover, IDUs' perceptions of law enforcement activity may not reflect the realities of police enforcement. This multi-layered pattern of influences suggests the need for more thorough collaborations between public health and law enforcement agencies in the related realms of drug use and HIV prevention (Burris et al., 2004).

In Vietnam and China, tensions exist within legal and policy frameworks regarding drug use. In China and Vietnam, drug use is still treated as a 'social evil' and the overall approach to drug users remains quite repressive and punitive. In both countries, there are periodic crackdowns during which large number of drug users are arrested and sent to rehabilitation centres ('06 Centers') in Vietnam or to compulsory detoxification centres or re-education-through-labour-centres (RELCs) in China. Depending on how one estimates the total number of IDUs in China, somewhere between 10% and more than one-third of them spend time in such a facility each year (Reid & Costigan, 2002). The rehabilitation and detoxification centres offer little more than 'cold-turkey' detoxification and 'moral' education.

At the same time, some policies and practices appear to be at odds with this repressive approach, including recent central. Government mandates urging the adoption of harm reduction strategies for IDUs. Such newer policy directions appear in Vietnam's recently adopted National HIV/AIDS Strategy (Government of Vietnam, 2004) and in a recent China State Council document requiring health, public security, and other government agencies to work together more closely on HIV/AIDS prevention, specifically on pilot needle/syringe exchange and condom social marketing programmes (China State Council, 2004). In both countries, new needles/syringes are legally sold and widely available in pharmacies at very low cost.

The interplay of laws and practices surrounding the sale and possession of needles/syringes exemplifies the delicate balance between HIV prevention and law enforcement. It is legal to buy and possess needles/syringes but it is illegal to use them to inject illicit drugs. Police are charged with enforcing the laws against drug use but they may also be asked to assume a more tolerant public health orientation toward needle exchange and pharmacy sale of needles/syringes to IDUs (Burris et al., 2004). It may be difficult for them to reconcile these roles, but such a reconciliation is necessary for some HIV prevention programmes to be successful.

This paper uses the experience of an HIV prevention project for IDUs in a border area of southern China and northern Vietnam to explore the multiple influences of actual and perceived law enforcement activity on the patterns of IDUs' participation in the interventions.

Methods

The cross-border HIV prevention project: China and Vietnam

With joint funding from the National Institute on Drug Abuse, U.S. National Institutes of Health and the Ford Foundation offices in Hanoi and Beijing, a cross-border HIV prevention project for IDUs was launched in 2001 in Ning Ming County, Guangxi Province, China and Lang Son Province, Vietnam. The map in Fig. 1 locates the project sites. This is the first-ever HIV prevention project for IDUs in which the same interventions were carried out on both sides of an international border. This China–Vietnam border area lies along a major heroin trans-shipment route from the 'Golden Triangle' of Burma, Laos, and Thailand to Hong Kong and the rest of the world (Beyrer et al., 2000). As heroin began to be available in the traditional opium-smoking regions along this and other shipment routes, residents began to use it, at first by inhalation and smoking and quite quickly by injection, users began to share injection equipment and HIV infection began to occur. At the start of the cross-border interventions,

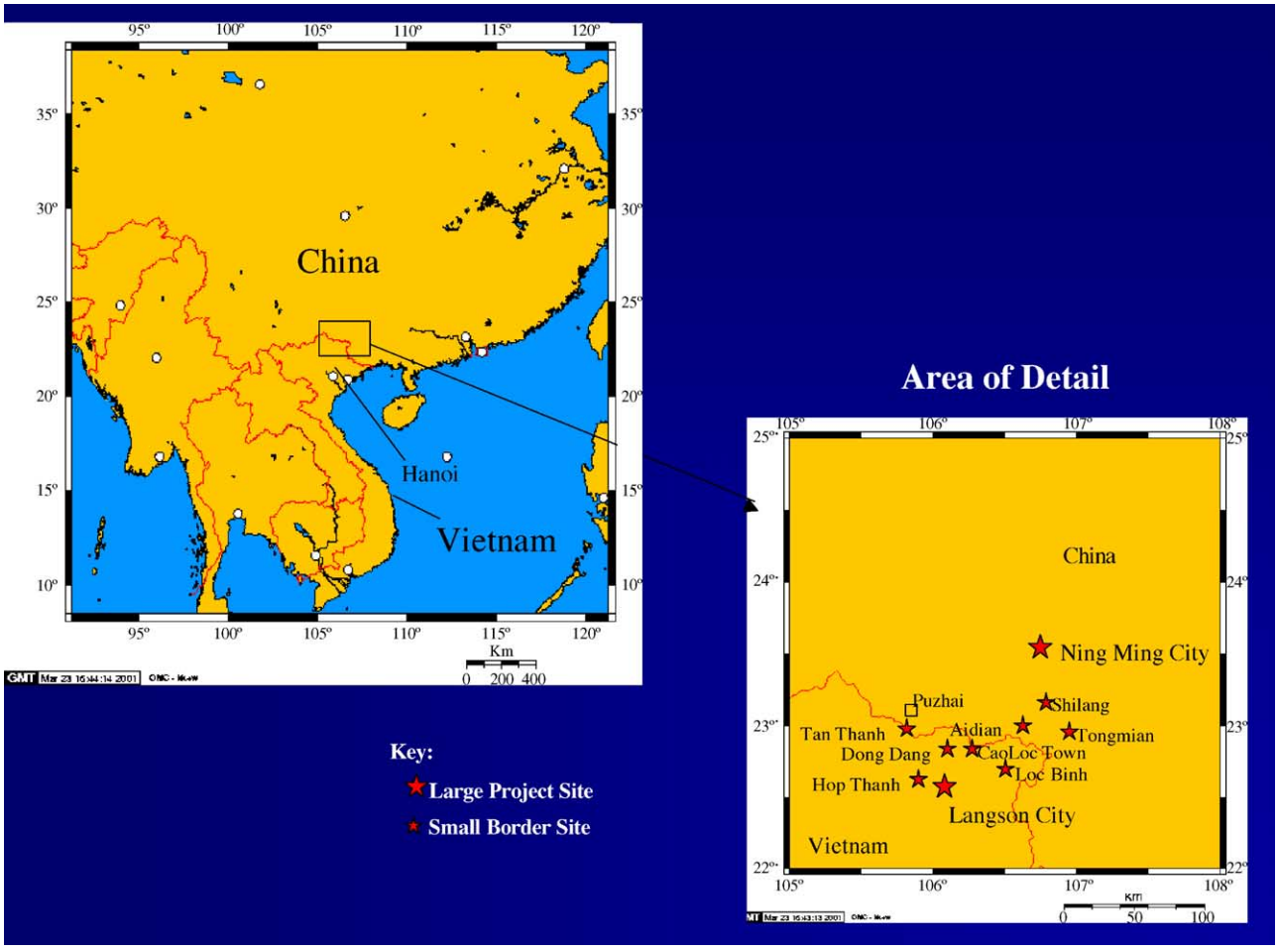

Fig. 1. Map of project sites.

surveys of IDUs revealed HIV prevalence of 46% in Lang Son and 17% in Ning Ming (Hammett et al., 2003).

In this cross-border project, provincial and local health department staff implemented a peer outreach model intervention in four sites in Ning Ming and six sites in Lang Son. Salaried cadres of peer educators, most of whom continue to use drugs, contact IDUs in the community, provided HIV risk reduction information and distributed new needles/syringes and condoms and vouchers redeemable in participating pharmacies for new needles/syringes and condoms. The peer educators also collected used needles/syringes from IDUs and shooting places, parks, and other locations in the community. In Ning Ming County, project centres have been established in each site where peer educators meet and IDUs can come to obtain needles/syringes, condoms, and pharmacy vouchers and return their used needles/syringes (Cohen, 2003, 2004; Hammett et al., 2003).

In two additional sites—Guigang township, Guangxi Province, China and Ha Giang town, Vietnam—peer-driven interventions (PDI) for IDUs were also in operation as part of the cross-border project. A PDI differs from the outreach model being used in Ning Ming and Lang Son in that it has no salaried peer educators but rather involved a much larger number of drug users through a chain referral process. Drug users educated their peers on specific elements of HIV risk reduction information and recruited them to come to a staffed project storefront where they can receive more risk reduction information, new needles/syringes, and condoms, and have the opportunity to become recruiters themselves. Drug users received modest rewards for visiting the storefront, recruiting new participants, and returning used needles/syringes. Recruiters also received graduated rewards based on how well their recruits perform on a test of the specific risk reduction knowledge (Broadhead et al., 1998).

Because of the sensitive issues involved in the cross-border project and the potential for disruption of the interventions by the police and public security, the support of all key stakeholders was essential to the project's smooth functioning and ultimate success. The project has received from the beginning the full support of political leaders, police officials, mass organisations, pharmacies and other stakeholders in all of the project sites. In both countries, government and police agencies committed themselves in writing to support the project. In Ning Ming County, the health department and public security bureau entered into a written agreement whereby the police agreed to support and refrain from interfering with the

interventions. In Vietnam, the Lang Son Provincial People's Committee issued a written opinion supporting the project and calling on all agencies under its jurisdiction, including police, to provide full support and cooperation. People's Committees issued similar rulings at the local level in each Vietnam project site. Written agreements such as memoranda of understanding have been used successfully in other countries to document the support of law enforcement and other government agencies for such HIV prevention interventions (Lemouchoux & Effendy, 2004).

The ongoing support for the cross-border project has been achieved through regular education carried out by project staff and peer educators and regular meetings between project staff and the various government and community stakeholders. A similar effort initiated by leaders of the health department in Pingxiang township, adjacent to Ning Ming, was able to enlist the coordinated support of political leaders, police, and other key agencies in an initial acknowledgement that the community had a problem with HIV/AIDS and in the adoption of broad community education and harm reduction approaches to combat HIV among IDUs and sex workers. The health department and public security bureau negotiated an agreement allowing IDUs to meet with peer educators and receive medical check-ups and HIV risk reduction counselling on certain days each week without fear of being arrested (Szlezak & Howitt, 2004).

Evaluation methods

Evaluation of the cross-border interventions relied predominantly on cross-sectional surveys of IDUs (including interviews and HIV testing) just before the start of the interventions and at 6-month intervals following implementation. Data collection methods were parallel in Ning Ming County and Lang Son Province, with some variation in the strategies used to recruit IDUs for the surveys. To be eligible, a participant must have injected heroin in the past 6 months and be at least 18 years of age.

In Ning Ming County, a modified 'snowball/peer recruitment' technique was used. The project peer educators sent letters to IDUs they knew personally, inviting them to come to participate in the survey. The IDUs who came to project centres for interviews were encouraged to recruit two to three additional participants. The research participants received 20 Chinese yuan (approximately $ 2.50) for the interview, 5 yuan for each additional male respondent recruited, and 10 yuan for each additional woman respondent recruited. In Vietnam, approximately one-half of each sample was based on lists of IDUs registered with the government in each project site (normally meaning that they have been arrested and/or sent to a detoxification or rehabilitation centre or prison at least once) and the other half was based on individuals selected from IDUs present at gathering or shooting places mapped by the study team. These places may change over time depending on the pattern and intensity of police activity in the area. For the half of the sample based initially on registered lists, 10 clusters of 25 individuals each were selected with probability proportional to size (PPS) from the lists of IDUs in each commune. Then four IDUs were picked at random from each selected cluster and these referred others, and so on, by 'snowball' method until the quota for the commune was reached. For the portion of the sample selected initially at IDUs' gathering or shooting places, sample quotas were determined by PPS based on the numbers of individuals observed at these places during the mapping phase. Then, the interview team visited the selected places and chose four individuals at random from those present at each place at that time. The quotas for each place were then filled by snowball method. The Vietnamese participants were paid 30,000 dong (about US$ 2) for the interview and HIV test.

An interviewer explained the survey procedures to each prospective participant and very few have refused to participate. In Vietnam, an oral informed consent was obtained from participants with the interviewer certifying that oral consent by signing the form. This procedure was recommended by the Institutional Review Board of the National AIDS Standing Bureau in order to provide more assurance of confidentiality to prospective participants. In China, standard signed informed consents were obtained from all participants.

Unique codes were constructed for each participant based on numeric date of birth and several letters representing, for example, the first letter of the mother's family name. Construction of the record number was slightly different in the two countries. The objective was to have a unique identifier composed of items that participants can readily remember in order to obtain their HIV test results. Test results were coded only by these identifiers.

A structured instrument was used for the interviews, based on version 2b of the questionnaire being employed in the World Health Organization's Drug Injection Study, Phase II (Stimson, Des Jarlais, & Ball, 1998). Questions related primarily to specific drug-related and sexual activities and measures of participation in the intervention during the 6-month period prior to the interview. The interviews were conducted by trained interviewers, primarily staff of the local health departments. The first IDU survey was conducted in July 2002 in Vietnam and between July and September 2002 in China. Data sets were prepared in EpiInfo, version 6.04 by staff of the Guangxi Center for HIV/AIDS Prevention and Control and the National AIDS Standing Bureau of Vietnam, the latter subsequently merged into the General Department of Preventive Medicine and HIV/AIDS Control of the Ministry of Health. The data were analysed at Abt Associates Inc. using SAS, Version 8.2 (SAS Inc., Cary, NC, USA).

The cross-sectional surveys of IDUs included HIV antibody testing. Participants were given pre-test counseling and post-test counseling at local health centres. Blood was drawn at the time of the interviews by trained phlebotomists from local health departments. Participants were given a card with their unique identifier and told that they can return on a certain date to the local health centre to receive their test results using this number.

Data sources for this paper

Data for this paper were drawn from the cross-sectional surveys of IDUs as well as monthly process data reports and site visit observations and interviews with project staff, peer educators, IDUs, and police officials. The process data, collected by the local health departments directly overseeing the interventions, tracked the numbers of new needles/syringes distributed by peer educators and at project centres, pharmacy vouchers distributed and redeemed, and new needles/syringes provided by pharmacies in return for vouchers. In Vietnam, it was possible to track vouchers according to the communes in which they were distributed and the specific pharmacies in which they were redeemed.

Observational and interview data were gathered during repeated visits to project sites in Ning Ming County, China and Lang Son Province, Vietnam by study principal investigator Theodore M. Hammett and project intern Nicholas Bartlett. Hammett conducted 13 visits to Lang Son and 10 visits to Ning Ming between January 2002 and July 2004. Bartlett conducted three visits to Ning Ming during July 2004. These site visits involved discussions with project staff, peer educators, police and other government officials. Repeated meetings were held with four key project staff in Ning Ming and four in Lang Son. In addition, we had discussions with communal and local staff in specific project sites. Repeated discussions were held with more than 30 peer educators across project sites in Lang Son and 20 peer educators across the Ning Ming sites. We held discussions as well with two police officials in Ning Ming and heard from two Lang Son police officials during semiannual joint meetings of the project. These meetings and discussions were not based on structured instruments but rather were unstructured conversations in which we asked questions about patterns of law enforcement activity and its potential relationship to IDUs' participation in the interventions. These discussions were not recorded or transcribed, but extensive notes were kept and these were written up into summaries and trip reports that were examined to identify common themes and patterns.

The study was reviewed and approved by the institutional review boards (IRBs) of the following institutions: Guangxi Center for HIV/AIDS Prevention and Control, the National AIDS Standing Bureau of Vietnam, Abt Associates Inc., and Beth Israel Medical Center, New York.

Results

According to the cross-sectional surveys through 12 months of project implementation, the interventions were reaching 60–75% of IDUs in the sites at least periodically, the frequency of drug-related HIV risk behaviours had significantly declined, and HIV prevalence among IDUs had remained stable in the project sites on both sides of the border (Hammett et al., accepted; Naik, 2004).

These positive results and the relative smoothness with which the interventions have unfolded in the communities owed much to ongoing efforts of coordination and education. From the beginning, there had been no police disruption of or interference with intervention activities. In Lang Son, project staff reported that, pursuant to the endorsement of the project by the Provincial and local People's Committees, the police's posture toward the project was to keep 'one eye open and the other eye closed.' In Ning Ming, project staff developed personal relationships with a number of police officials including the chief of the anti-drug squad. Police in Ning Ming, including the anti-drug chief, spoke very highly of the project, reporting that in their experience almost all drug users in the community knew about the interventions and had received peer education in safer injection practices. Police helped to recruit peer educators in Ning Ming and arranged for quick release of peer educators from detoxification centres. In general, the peer educators were well known to the police and one even reported being taken out for dinner by police officers. The peer educators in both Lang Son and Ning Ming had official identification cards and had achieved recognition of their activities by the police. As a consequence, they were not afraid of carrying new or used needles/syringes or performing any of their duties as peer educators.

However, this police support for and non-interference with the cross-border project activities did not mean that law enforcement activities, and the perceptions of them by IDUs, had no effect on the interventions. Indeed, it appeared that law enforcement had multiple influences, whether intended or not, on the extent and patterns of IDUs' participation in the cross-border interventions. These influences may be seen in the changing numbers of needles/syringes provided by the project, patterns of IDUs' preferences for ways to receive new needles/syringes, the extent to which IDUs were willing to retain used needles/syringes for exchange with peer educators or at project centres, and the geographic patterns of IDUs' receiving and redeeming pharmacy vouchers.

IDUs' levels of participation

Figs. 2 and 3 show how the total number of needles/syringes provided by the Lang Son and Ning Ming project sites, a measure of IDUs' levels of participation in the intervention, varied during the period November 2002–May 2004. The total numbers of new needles/syringes provided by the project by direct distribution and through pharmacy vouchers increased from 6000 to 7000 per month in each country in the early months of intervention to 13,000–15,000 in the spring of 2003, then retreated to an average of 10,000–11,000 per month, with some lower months, from the last few months of 2003 into the spring of 2004. In both Vietnam and China, the monthly totals of needles/syringes distributed by the project in the spring of 2004 had not returned to the highs reached in the spring of 2003. Over the

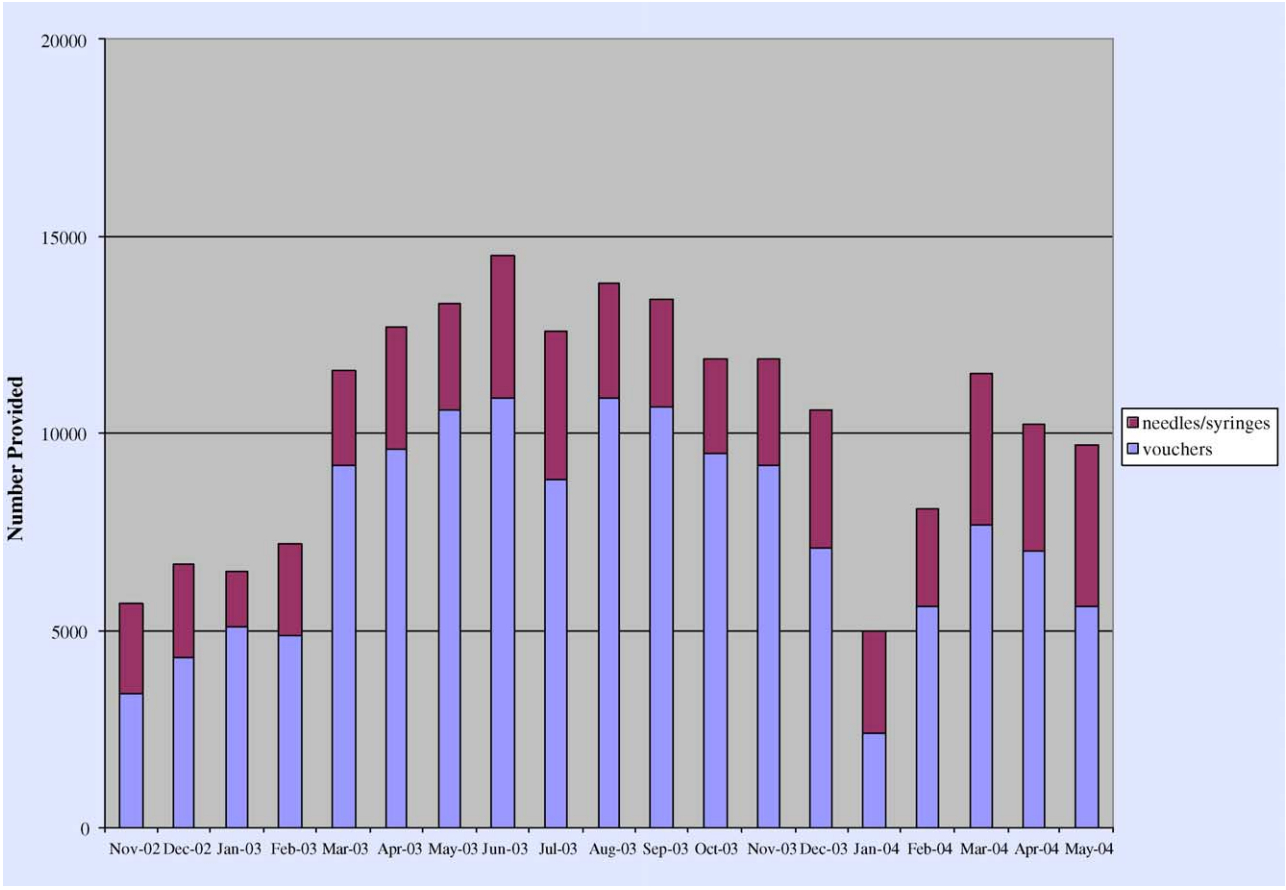

Fig. 2. Vouchers and new needled/syringes provided, Vietnam: November 2002–May 2004.

entire period, on average, the Chinese sites provided 11,500 needles/syringes per month while the monthly average in Vietnam was 10,300.

IDUs' preferences for ways to receive new needles/syringes

IDUs' preference for direct needle/syringe distribution and pharmacy vouchers had very different patterns in Lang Son and Ning Ming, as shown in Figs. 2 and 3.

In Lang Son, the IDUs have from the beginning of the project strongly preferred pharmacy vouchers over direct receipt of needles/syringes. On average during the period covered, 71% of the needles/syringes provided in the Lang Son sites each month were through pharmacy vouchers (Fig. 2). In Ning Ming, by contrast, IDUs initially received more vouchers than new needles/syringes directly but quite soon shifted to favouring direct receipt of needles/syringes (Fig. 3). On average, 49% of the needles/syringes provided per month were through direct distribution with progressively higher monthly percentages over time. Currently, vouchers are used only in Ning Ming City with the other sites (Aidian, Tongmian, and Shilang) offering only direct distribution. The Ning Ming IDUs' increasing preference for direct receipt of needles/syringes was documented in the cross-sectional surveys. Between the 6-month and 18-month surveys, the percentage of respondents saying that they preferred to receive needles/syringes directly from peer educators increased from 43% to 70% while the percentage preferring to use pharmacy vouchers declined from 57% to 6%.

IDUs' willingness to retain used needles/syringes for exchange

In the Ning Ming sites, according to interviews with peer educators and staff, most IDUs were willing to carry their used needles/syringes at least long enough to give them to the peer educators or take them to the project centre for exchange. Recently, however, fewer IDUs have been visiting the project centre in Ning Ming City and more IDUs have begun keeping their used needles/syringes at home or at their shooting places where peer educators come to collect them.

In the Ning Ming sites, the intervention works largely as a needle/syringe exchange. While IDUs were not required to return all used needles/syringes in order to receive new ones, peer educators and project staff strongly encouraged the return of used equipment, which may also help to explain the

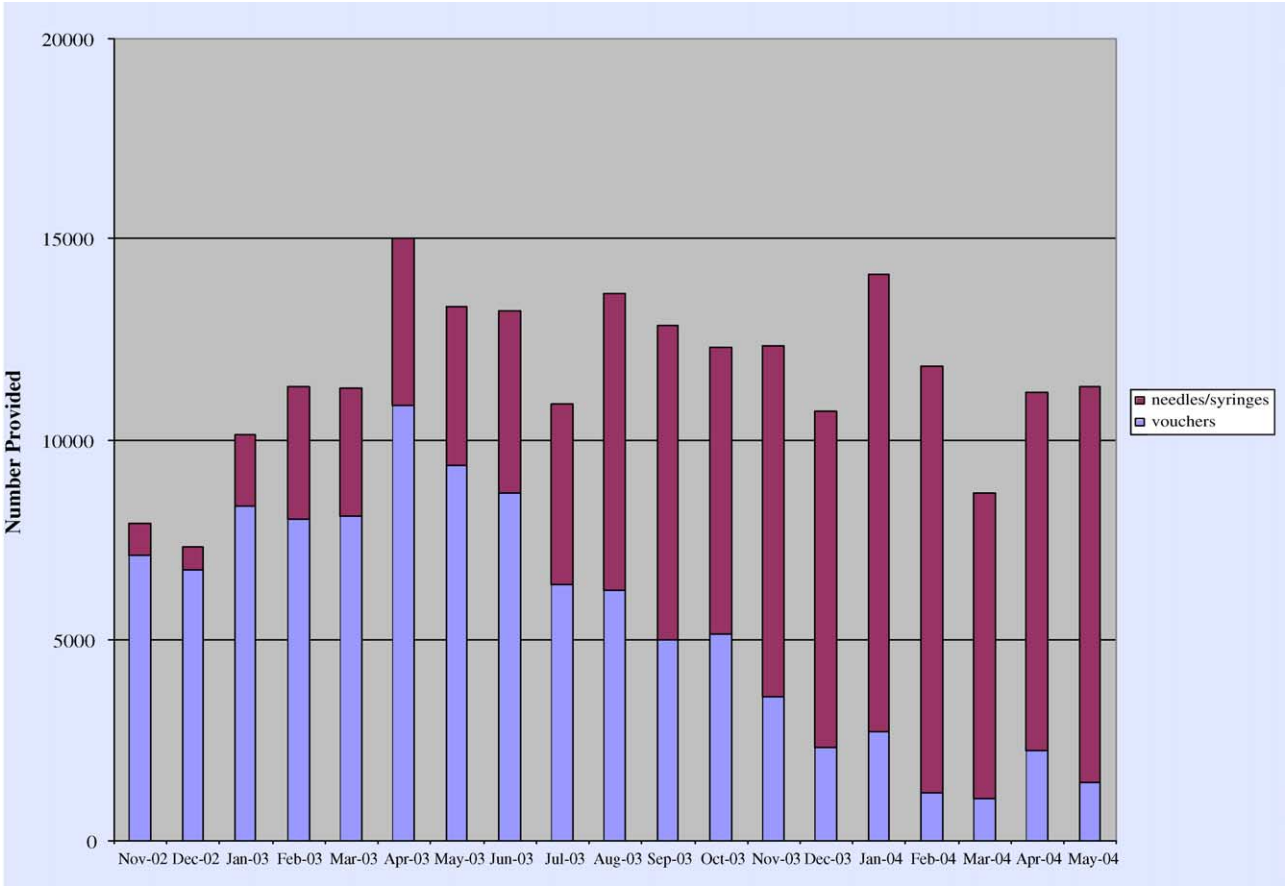

Fig. 3. Vouchers and new needled/syringes provided, China: November 2002–May 2004.

persistence of the exchange function even as law enforcement activity increased. Ning Ming IDUs' willingness to return used needles/syringes to peer educators or the projects centres was confirmed by cross-sectional survey data. Between 76% and 80% of IDUs participating in the 6-, 12-, and 18-month surveys said they returned used needles/syringes to peer educators while 25–29% said they threw away used needles/syringes (the percentages add to more than 100% because some respondents reported doing both).

In Vietnam as in China, the intervention was originally designed as an exchange but Lang Son staff were flexible on this point in light of the concerns and preferences of the IDUs. In contrast to the situation in the Ning Ming sites, interviews with peer educators indicated that very few Lang Son IDUs were willing to retain used needles/syringes apparently for fear of arrest. Interviews with peer educators indicated that IDUs were concerned that even the tiny amount of illegal drug remaining in the syringe after injection may constitute possession and be grounds for their arrest. Therefore, they tended to discard their used needles/syringes immediately after injecting. Peer educators directly distributed pharmacy vouchers and new needles/syringes without requiring return of used needles/syringes and made regular rounds of shooting places and IDUs' homes to collect the used equipment.

Geographic patterns of IDUs' receiving and redeeming pharmacy vouchers

In Lang Son Province, the project is able to track each pharmacy voucher according to the commune in which it was given out and the pharmacy at which it was redeemed. (In China, the smaller number of participating pharmacies and dwindling use of vouchers makes such analysis less informative.) Analysis of these patterns in the Lang Son sites revealed that many vouchers were redeemed in communes different from where they were given out. Between July 2002 and May 2003, only 11% of the vouchers distributed in Hoang Dong commune, Lang Son City and only 15% of those distributed in Vin Trai commune, Lang Son City were redeemed in pharmacies in those communes. Less than half the vouchers distributed in Tam Thanh commune, Lang Son City were redeemed there, while about three-quarters of those given out in Dong Kinh commune, Lang Son City and in Cao Loc Town and Loc Binh Town were redeemed there.

Analysis of data on voucher distribution and redemption from February to May 2004 revealed a different pattern. In Lang Son City, vouchers distributed in Vin Trai and Hoang Van Thu communes were virtually all redeemed there, with equivalent proportions of two-thirds and one-fourth in Dong Kinh and Tam Thanh communes, respectively, and only 13%

in Chi Lang commune. Most of the outlying sites (Tan Thanh, Dong Dang, and Loc Binh) continued to have high rates of local redemption. However, only about one-third of vouchers distributed in Cao Loc town were redeemed there with the other two-thirds redeemed in Lang Son City, about 8 km away.

Discussion

The results section presents some basic indications of the patterns of IDUs' participation in the cross-border HIV prevention interventions. What interpretation can we reasonably make of these patterns? The qualitative interviews and discussions conducted with project staff, peer educators, other drug users and officials were non-systematic in nature. They were not based on any specific sampling plan, schedule, or structured instruments. However, these discussions were quite extensive and carried out repeatedly over 2 years. Therefore, we believe that they can yield some valuable, albeit impressionistic, indications of the relationships between patterns of law enforcement activity and patterns of IDUs' participation in the interventions.

Levels of participation

Since the cross-border interventions began, police have continued to arrest drug users and carry out periodic crackdowns on drug users. Although the ebb and flow of law enforcement activity is not related to the project's activities, it affects IDUs' willingness and ability to participate in the interventions.

Interviews with Ning Ming peer educators and IDUs indicate that crackdowns and elevated enforcement activities from late 2003 into 2004 resulted in arrest of many IDUs and their commitment to rehabilitation centres and drove others underground or prompted them to leave the area at least temporarily. Peer educators and staff estimate that since early 2004, police enforcement has stabilised at a higher level than in 2003. Concurrently, there has been a stagewise quadrupling of the capacity of the Ning Ming detoxification centre from 100 to 400, which resulted in a reduction in the absolute number of IDUs in the community and thus available to participate in the interventions.

The increase in law enforcement activity and its perceived stabilisation at higher levels coincided with a decline in total numbers of needles/syringes provided by the project during late 2003 and early 2004 and the generally lower levels of needle/syringe provision into the spring of 2004. We have more specific information on patterns of law enforcement activity in Ning Ming but project staff and peer educators in Lang Son also reported police crackdowns from late 2003 into early 2004.

Project staff and peer educators in Ning Ming report that during normal times police do not generally arrest IDUs for possession of drugs but only if they commit another crime such as robbery. During crackdowns, however, IDUs have a greater fear of being arrested for drug offenses, particularly while purchasing or injecting drugs. Many drug users know of crackdowns in advance, particularly those that occur at regular times each year, such as around the International Day Against Drug Abuse and Illicit Trafficking in late June. Sometimes crackdowns are not as severe as anticipated, but during these times drug users tend to be much more circumspect in their activities, staying out of public view as much as possible, avoiding congregating in large groups, moving to less publicly observable shooting places, changing their preferred pharmacies, and covering up track marks or other physical evidence of recent injection.

Police crackdowns are not at all related to the interventions themselves, but declines in distribution of sterile injection equipment associated with this law enforcement activity could have resulted in increased sharing and other unsafe injection practices. Fortunately, at least in Ning Ming, interviews with peer educators suggest that even during crackdowns the IDUs who remained in the community were able to access new needles/syringes and were not sharing injection equipment. As shown in our cross-sectional surveys, HIV prevalence among IDUs has remained stable in the project sites.

Despite the project's assurances, some IDUs may continue to believe that contacting the project will lead to their being arrested and thus they avoid further participation. The early experience of the project's PDI site in Ha Giang town, Vietnam illustrates this problem. In the spring of 2003, consultants to the project conducted formative research to assess the drug scene in Ha Giang and the feasibility of implementing a PDI for IDUs there. This research involved a series of qualitative interviews and focus groups with IDUs. Soon after this research was conducted, the police began a crackdown on IDUs around the observance of the international drug control day. This crackdown was entirely unrelated to the formative research or to the plan to implement a PDI. Indeed, the local authorities, including the police, had all given their support to the project. Purely by coincidence, however, a number of the IDUs who had participated in the qualitative interviews and focus groups were arrested soon thereafter as part of the crackdown. Inevitably, the IDU community perceived a connection between the two, even though none in fact existed. It took many months of networking and education to counteract this perception and to assure IDUs that it was safe to come to the PDI storefront and participate in the intervention.

Preferences for method of receiving needles/syringes from the project

As reported above, IDUs in Lang Son preferred pharmacy vouchers while those in China preferred direct receipt of needles/syringes from the project. According to interviews with peer educators and project staff, Lang Son IDUs' preference for vouchers reflects several factors: the greater convenience and unobtrusiveness of vouchers, the fact that the IDU can

receive for each voucher an ampoule of sterile injection water or a condom in addition to a new needle/syringe, and IDUs' fear of carrying new needles/syringes for any length of time. Instead, they preferred to redeem the vouchers at a pharmacy near their planned shooting place just before they intended to inject. A potential problem is that pharmacies are not typically open during the late-night hours in which IDUs are often most active but this does not seem to have dampened IDUs' preference for the vouchers.

The declining popularity and use of vouchers in Ning Ming seems to be based on several factors. First, actual or feared police enforcement activity caused IDUs to feel that appearing at pharmacies to redeem vouchers poses more of a threat of apprehension than receiving needles/syringes directly from peer educators or project centres. Ongoing stigmatisation of IDUs also discourages them from appearing at pharmacies, where they might be observed. Second, interviews with peer educators and IDUs in the Ning Ming sites suggest that another important reason for IDUs' changing preferences was that the limit on the number of vouchers, needles/syringes, or combination thereof that each IDU could receive from the programme was increased from 7 to 20 per week after 3 months of experience with the intervention. Being able to receive up to 20 needles/syringes all at once meant that an IDU could keep a week's supply on hand while using vouchers would mean going repeatedly to a pharmacy to obtain smaller numbers of needles/syringes. This is considered less convenient and increases the risk of being observed. A third reason is that the initial novelty of the vouchers may simply have worn off. Fourth, there is no built-in incentive for using vouchers in Ning Ming since the peer educators and project centres directly distribute not only needles/syringes but also ampoules of distilled water and condoms. A change in October 2003 to offer an ampoule of distilled water and a condom as well as a needle/syringe for each voucher did not halt the decline in use of vouchers in Ning Ming. In Vietnam, by contrast, the peer educators directly distribute only needles/syringes and condoms while vouchers must be used to obtain ampoules of distilled water without charge.

IDUs' willingness to retain used needles/syringes for exchange

Just as law enforcement activity may affect IDUs' levels of participation in the interventions, so an actual or perceived law enforcement threat may influence IDUs' willingness to retain drug injection equipment for exchange. Fear of arrest for possession of injection equipment is widespread in the U.S. where many states outlaw possession of drug paraphernalia (Bluthenthal, Kral, Erringer, & Edlin, 1999; Clatts, Sotheran, Luciano, Gallo, & Kochems, 1998; Koester, 1994). In the cross-border project sites, as noted above, police have not interfered with the interventions and possession of needles/syringes is lawful. Nevertheless, many Lang Son IDUs persistently fear arrest for carrying used needles/syringes. This is based at least, in part, on their past experience with police. Such deep-rooted fears may only dissipate with the accretion of new experience that participation does not result in being targeted by the police.

In Ning Ming, the project staff and peer educators expected IDUs to accept and use large numbers of pharmacy vouchers and worked hard to implement this strategy. However, as IDUs expressed increasing preference for a more anonymous way of obtaining needles/syringes, the project improved its direct delivery service by gathering information about the types of needles that the IDU population needed and setting up places to drop off and pick up weekly supplies of new and used equipment. Creative planning by the peer educators and project staff made it unnecessary for drug users to frequent pharmacies, an option that most Ning Ming IDUs found to be less convenient and safe than receiving needles/syringes directly from peer educators in the community, at their homes or at shooting places.

Patterns of pharmacy voucher redemption

The patterns of voucher redemption in the Lang Son sites may simply reflect IDUs' normal preferences for obtaining needles/syringes close to preferred injection places, and such preferences may change over time. In addition to convenience, however, these preferences may be influenced by IDUs' fear of the police or of being seen obtaining or using needles/syringes in their own neighbourhoods, and the levels of such fears may also vary over time.

The fear of being seen in one's own neighbourhood may be more a function of identification and stigmatisation by neighbours than of fear of the police. However, the two are related. An IDU may be more likely to be identified redeeming a voucher in his or her own neighbourhood, and being identified by a neighbour increases the likelihood of being betrayed to and arrested by the police. These are tightly knit, family-centred communities where secrets are hard to keep and information travels fast.

Conclusion

The experience of the cross-border HIV prevention project in China and Vietnam demonstrates the delicate balance between law enforcement policies and actions on the one hand and certain interventions for the prevention of HIV among IDUs on the other. Drug use is illegal as well as being heavily stigmatised in China and Vietnam. HIV infection is also stigmatised. Although a broader view of police discretion may be justified, harm reduction advocates should not simply expect law enforcement officers to 'look the other way' when illegal activity occurs. Indeed, political and social imperatives may require the strict enforcement of drug laws and periodic crackdowns on drug users.

In this context, continued law enforcement presence and activity, as well as ongoing stigmatisation and discrimination, will likely influence and perhaps limit IDUs' participa-

tion in HIV prevention programmes involving needle/syringe exchange. This may occur whether or not police have agreed to support such interventions or in fact have allowed them to function unimpeded.

Initiatives like the cross-border project may be able to work simultaneously on two or more levels, implementing prevention projects locally and using education and personal relationships to help shape certain aspects of police enforcement and create a more intervention-friendly environment in specific communities. In the short and medium term, such local interventions can play important roles in controlling the spread of HIV and other infectious diseases among IDUs and between IDUs and the larger communities in which they live. At the same time, it is possible to work with provincial and national leaders to pave the way for a more humane understanding of drug use and an approach more oriented to treatment and disease prevention than to punishment.

Moreover, occupying a geographic and policy space that allows access to both IDUs and police, project implementers may be able to create new channels of communication between two groups that rarely interact outside a law enforcement context. Both IDUs and police may have initial reservations about participating in the intervention, fearing that it could upset the status quo and increase their own risks. Each may require evidence of the programme's safety and efficacy before initial fears of involvement are overcome. Both can benefit from engaging in ongoing and evolving discussions with project implementers so that misunderstandings and mistrust are minimised. Sensitivity to the diverse pressures shaping the behaviours of police (such as pressures to meet arrest quotas and follow national mandates) and IDUs (such as fear of arrest and concern about disclosure of confidential information) can help to strengthen the channels of communication. Due to changing environmental factors beyond either group's control (including high-level government drug control initiatives), programmes must be flexibly implemented so as to adapt to the possibly changeable perceptions, preferences, and needs of the both groups. Attention to this process can result in written commitments of approval, special treatment for peer educators, and non-interference on the part of the police, as well as more frequent participation in the interventions by larger proportions of drug users.

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