

Exploring stakeholder perceptions of facilitators and barriers to accessing methadone maintenance clinics in Yunnan Province, China

Morgan M. Philbin^{a*} and Fujie Zhang^b

^a*Department of Health, Behavior and Society, The Johns Hopkins Bloomberg School of Public Health, 624 N. Broadway, Baltimore, MD, USA;* ^b*National Center for AIDS/STD Control and Prevention, Chinese Centers for Disease Control and Prevention, Beijing, China*

(Received 28 April 2009; final version received 4 September 2009)

Injection drug use is an ongoing public health crisis in China and one of the largest contributors to the transmission of HIV/AIDS. Though the government has rapidly scaled up methadone maintenance treatment clinics, they have not been extensively evaluated to analyze factors influencing rates of attendance. We explored the facilitators and barriers to accessing methadone maintenance clinics in Kunming City, Yunnan Province, China. Using in-depth qualitative interviews conducted from February 2008 to June 2008 with 35 informants – injection drug users (IDUs) and key stakeholders – we explored factors that determine whether drug users decide to present at methadone clinics. Interviews were digitally recorded with consent, transcribed verbatim, and translated. Content analysis was conducted to identify themes which included general attitudes toward methadone treatment, barriers and challenges to access, and suggestions for improvement. Within these, topics included responses to methadone, its side effects, and fear of discrimination, loss of privacy, and police interference. Respondents also listed numerous suggestions for improvement including raising awareness of harm reduction both among drug users and the community, providing additional support in the form of psychological counseling, job training and behavioral therapy, and increasing communication between police, government, and public health officials. High rates of HIV infection among IDUs in China have prompted public health responses including the scale up of methadone maintenance clinics. Our results may inform policy strategists in implementing social–structural changes to create enabling environments that facilitate an increase in access to methadone clinics among IDUs in Kunming.

Keywords: China; HIV/AIDS; harm reduction; methadone maintenance treatment

Introduction

China detected its first AIDS case in 1985 and by 2002 all 31 provinces and autonomous regions had reported HIV infections among injection drug users (IDUs) (UNTG, 2007a). On average, HIV prevalence among IDUs varies between 5.4% and 8.2%, but dramatic geographic differences exist with sites in Yunnan, Xinjiang, and Guangxi, reporting rates up to 80% (Qian, Schumacher, Chen, & Ruan, 2006; UNTG, 2007b; Zheng, Zhang, & Qu, 1997). Since 1989, when HIV was first discovered among IDUs, drug use has been the largest contributor to the epidemic (Qian et al., 2006), highlighting its importance when addressing the spread of HIV in China.

Harm reduction is a strategy to reduce the negative health, social, and economic effects of drug use, without requiring abstinence from drugs (Joseph, Stancliff, & Langrod, 2000; Tkatchenko-Schmidt, Renton, Gevorgina, Kavydenko, & Atun, 2008). Methadone maintenance treatment (MMT) is an effective and safe substitution therapy for opioid

dependence (Pang & Hao, 2007) that reduces injection-related risk behaviors, blood-borne infections, and can help IDUs recover various social functions (Drucker, Lurie, Wodak, & Alcabes, 1998). One Chinese study found that after a year of MMT enrollment the percentage of users injecting dropped from 69 to 8.8% and the frequency of injection from 90 times a month to twice (Pang & Hao, 2007). Harm reduction has been especially successful in lowering infectious disease rates among IDU driven HIV epidemics (Pang & Hao, 2007; Sullivan & Wu, 2007).

In 2004, the first eight MMT clinics were established within China (Pang & Hao, 2007; Qian et al., 2006). By 2008 there were 600 MMT clinics treating 93,000 IDUs, with a total of 178,000 having received treatment (UNTG, 2007b). Eligibility for MMT was relaxed in 2006 and now includes: (i) showing previous failed attempts to quit; (ii) being ≥ 20 years; and (iii) of sound mind (Pang & Hao, 2007). To continue receiving MMT individuals cannot miss seven consecutive days (UNTG, 2007b). Dosage is

*Corresponding author. Email: mphilbin@jhsph.edu

determined by duration and amount of patients' drug use and whether methadone is used for maintenance or withdrawal (NCAIDS, 2009). Other provided services include counseling, condom promotion, peer education, and HIV referral treatment (UNTG, 2007b). Clients pay no more than 10 Chinese Yuan (~\$1.35) per day, and in some locations much lower (Qian et al., 2006).

Drug use in China is increasing (Chu & Levy, 2005), with the majority of users between 20 and 50 years (MOH, 2001). This study site, Kunming, Yunnan Province, borders Burma, Laos, and Vietnam, all countries in the "Golden Triangle", one of Asia's main opiate producing regions. As of October 2007, 40,000–50,000 people in Yunnan were HIV-positive (UNTG, 2007b), 65% of whom were infected through sharing non-sterile syringes (Chen, 2007). Kunming currently has 11 methadone clinics, and a small number of both non-governmental organization (NGO) and government run needle exchange programs.

This paper examines the attitudes of Kunming-based IDUs and stakeholders toward MMT and harm reduction. These stakeholders include peer-educators (former users cum outreach workers), doctors, and coordinators and directors at HIV and IDU focused organizations. More specifically, this study explores facilitators, barriers, and challenges to accessing MMT as well as suggestions for improving existing clinics. Previous articles have called for further research within China to understand low attendance and high drop-out rates in MMT clinics, why IDUs' support is low, and how to increase MMT's effectiveness (Pang & Hao, 2007; Peles, Schreiber, & Adelson, 2006; Qian et al., 2006; Yang et al., 2008). By examining this issue, we aim to help fill this gap and qualitatively identify challenges to accessing existing MMT clinics. Results will be used to assist in the development of culturally appropriate policy and treatment interventions in China.

Methods

Between February 2008 and June 2008, trained interviewers recruited 20 IDUs and 15 key stakeholders working at NGOs focused on IDUs, HIV/AIDS, and harm reduction. To create a comprehensive understanding of attitudes toward MMT, we used sampling methods adapted from the Rapid Policy Assessment and Response approach. This method combines traditional analysis with empirical data collection to assess how structural factors can affect community-level health interventions (Lazzarini, Case, Burris, & Chintalova-Dallas, 2007). This approach was recently used in five countries (Poland,

Russia, Ukraine, Mexico, and Kazakhstan) and found useful in identifying policy issues and guiding interventions (Kitsenko et al., 2008; Kozachenko et al., 2008; Sobeyko et al., 2007; Vyshemirskaya et al., 2008).

IDUs were recruited through needle exchange programs and methadone clinics, and included if they reported drug use in the last year. Stakeholders were recruited from NGOs focusing on methadone, rehabilitation, and HIV/AIDS. This included peer helpers, program coordinators, and rehabilitation center and methadone clinic staff. These individuals were interviewed to assess their understanding of, and ability to affect change in, the drug injecting risk environment, and included those involved with the creation of policies, and those with more on-the-ground experience.

Data collection and analysis

Qualitative methods were employed to generate nuanced and insightful narratives about access to harm reduction, without imposing pre-determined variables (Firestone-Cruz et al., 2006; Powers, 1998; Tashima, Crain, O'Reilly, & Elifson, 1996). We focused on local and societal level factors as previous research has suggested that the transmission of blood-borne infections is strongly shaped by socio-cultural norms and the political environment (Rhodes, Singer, Bourgois, Friedman, & Strathdee, 2005; Tempalski et al., 2007).

The study was discussed with each participant, and informed consent was obtained in all cases; subjects were informed that they could withdraw at any point. Interviews were semi-structured, yet provided opportunities to probe further if a specific topic seemed pertinent. The topic guide focused on methadone clinics, social-cultural barriers to access, and suggestions for further improvements. Interviews were conducted by the first author in private locations including rehabilitation centers, NGO offices, or places of work. Study subjects were given 25 Chinese yuan as compensation for their time. This study was approved by Institutional Review Boards at the Chinese Centers for Disease Control and Prevention.

Interviews ranged from 35 to 75 minutes (mean 45 minutes), were conducted in Chinese, and digitally recorded. Audio files and transcripts were anonymous and destroyed after transcription and translation. Native Chinese speakers conducted verbatim transcription and translation of the in-depth interviews. Translations were validated by bilingual individuals. A "do not translate" list including street jargon and slang was created to preserve the connotations of the original Chinese version.

Analyses focused on themes such as access to harm reduction in the Chinese context, cultural and political barriers, and suggestions for future improvement. Transcripts were first hand-coded by the authors who, after reading a cross-section, created a preliminary codebook containing key concepts and categories. These codes were applied to 10 interviews to assure applicability and allow for the creation of more nuanced versions of the codes. Using qualitative data analysis software, ATLAS.ti (Muh, 2004), interviews were uploaded and coded. Any discrepancies between coders were discussed among investigators and resolved.

Results

We interviewed 20 IDUs and 15 NGO staff in Kunming, China. The median age of IDUs was 35 years (range 26–43), whereas NGO staff was 36 years (29–55). Of the NGO staff, 13% had completed elementary school, 20% junior high, 40% high school, and 27% college; among IDUs, 45% completed junior high, and 55% high school. Of the 20 IDUs, 12 reported a history of methadone use, and 2/5 peer helpers were currently taking methadone. Nearly all NGO staff reported daily interactions with IDUs, and half worked directly with methadone patients. Though IDUs and NGO staff included various ages, genders, and time in this field, their beliefs regarding challenges to accessing harm reduction in China were similar. During the data analysis phase three general themes emerged and were assessed qualitatively: (1) general responses to MMT; (2) challenges to utilization; and (3) suggestions for improving access.

General responses to MMT

NGO staff all supported methadone use, noting that it can improve public safety and help to ease one's economic burden. As one individual mentioned:

MMT can reduce the number of crimes committed because of addiction, since if they have no drugs, they will steal, scramble and do some things against their will to access drugs. You can reduce the economic burden with access to methadone, and thus minimize the need for heroin. (Male-36-IDU)

One NGO-interviewee supported MMT, but noted tensions between the government, public health, and public security:

There view here is very different than in the U.S. There, we think of MMT as a harm reduction measure, whose role is to lower levels of HIV/AIDS. Here, it is a question of public order and

control. They want people off drugs and are not as worried about whether they might get infected with HIV. (Male-45-NGO)

Challenges to utilizing MMT

Though the majority of interviewees supported MMT, they discussed numerous barriers such as methadone's affect on the body, privacy and fear of discrimination, and police interference. Well over 1/3 of users mentioned side effects, complaining especially of weight loss and back pain. As one individual explained:

I don't use methadone because I read that methadone is not good for your mind, your liver, lungs, that it can burn ... Even if it only costs 10 Yuan, I would rather use heroin. If I have to drink methadone for the next five years I might as well just commit suicide. (Male-45-IDU)

Though the majority supported MMT, a minority saw anything besides full abstinence as contributing to drug abuse:

I believe that MMT is not good, many people get addicted to it. Though many think this measure is good, I don't think it is the fundamental solution to the problem. You are just substituting one for the other ... I want complete withdrawal. (Male-33-IDU)

Privacy and discrimination

Along with side effects, people mentioned the clinical environment itself. Though they feel safe once inside, they fear being seen by those outside and labeled as drug users:

The discrimination is from the outside. From the staff, the doctors, there is no discrimination. It comes from society ... the people who use drugs know very well the reputation they have, everybody looks down on us. (Male-42-IDU)

In addition to people outside of the clinic, a peer-educator feared being seen by others once inside the clinic:

Though I would like to drink methadone, I might meet my friends, and I'm afraid I would follow them back into drug use. I can accept drinking methadone, but not the risk environment. If somebody sees my face and says, 'do you have any money? Then lets go buy drugs.' Like that, we would impact each other. (Female-37-NGO)

Police and public security

The most consistently named barrier to access was the police, and people stressed the need for policy makers to create new laws affecting change. As an IDU described:

You come here for methadone, but there are police. Sometimes they lack a mandate, but work here anyway, squatting, just to make an arrest. So there is a feeling of distrust. Methadone is legal, but police still arrest people so many don't come here for fear of getting arrested and sent to detox. (Male-30-IDU)

The experiences of IDUs influenced their call to the government to attempt higher-level policy changes. As one individual described:

I don't know the specific rule, but police aren't supposed to be within 200–300 meters of the clinic. But they can stand just outside that ... The Government exerts pressure on public security, so that every month or every week they have to pay attention to the number of people they arrest. (Male-33-IDU)

In addition to police presence affecting whether IDUs present at methadone clinics, a few individuals noted how it affected their ability to rally as a community and create a united front to push for change and better access.

Suggestions for improving access to MMT

Among those supporting MMT, opinions differed on how best to proceed. Suggestions include working more closely with police, local government, and community members, and improving the clinics themselves. As one respondent explained:

Along with methadone there should be psychological, mental health services. Your body must bear the torture of methadone, but you do it to avoid AIDS ... centers need to be ideologically, psychologically able to help you, because even if you are physically uncomfortable, methadone is good. (Female-36-IDU)

Community support was seen as essential for the functioning of these clinics. Individuals stressed that people should try and further understand the current drug situation in order to help support possible solutions. As one individual explained:

I think there should be more propaganda and awareness to stress the advantages [of methadone]. It can reduce crime, help maintain public order, improve social order. First look at these issues, then do a lot of advertising. The government has to consider the issues, and support this treatment and not fear that doing so is a disguised support for the drug. (Male-45-NGO)

Discussion

This qualitative study examined the attitudes and barriers toward MMT clinics in Kunming, China. Although methods were not designed for assessing

frequencies of opinions or their distribution in the general community, certain themes were repeatedly mentioned, suggesting their salience. Findings indicated a number of barriers – side affects, privacy, police interference – but also outlined key suggestions to promote increased use of MMT.

Rates of stigma and discrimination toward IDUs remain high within China, and many expressed reluctance to attend MMT clinics for fear of being labeled as drug users. Studies report concerns among IDUs that utilizing harm reduction services would lead to the discovery of their status, resulting in increased stigma and prosecution by local police (Hammett et al., 2005b; Lu, Zhao, Bao, & Shi, 2008; Tkatchenko-Schmidt et al., 2008; Yang et al., 2008). Specific numbers of arrests are difficult to determine, but reports suggest that 10–30% of IDUs spend time in a detoxification center each year (Reid & Costigan, 2002). Though syringe possession is legal in China and country-wide guidelines regulate when an IDU can be arrested, in practice, the distinction between illegal and legal activities can become blurred and the laws on the books do not always reflect day-to-day enforcement (Hammett et al., 2005a; Hammett et al., 2003). For example, there is ambiguity regarding whether drug residue in a syringe should be considered illegal possession, or if known IDUs can carry syringes (Hammett et al., 2003). Studies in the USA have reported similar barriers to MMT: views that it substitutes one drug for another, punitive eligibility requirements, fear attendance will reveal ones IDU status, and that MMT clinics may lead to increased loitering and the creation of heroin markets near clinics (Des Jarlais, Paone, Friedman, Peyser, & Newman, 1995; Sullivan, Metzger, Fudala, & Fiellin, 2005). Few studies, however, noted the same level of reported side affects found in this investigation (Des Jarlais et al., 1995).

Respondents suggested that MMT clinics become more appealing to the users, which included calls for psychological counseling, job-training skills, and health education. Both psychological support and therapy – motivational enhancement therapy and motivational interviewing – have shown to increase effectiveness and retention rates within MMT clinics (Lu et al., 2008; Malcolm, 2003; Powell-Cope, White, Henkelman, & Turner, 2003). An evaluation of Chinese MMT clinics noted that, though psychological counseling is an important component of treatment to increase levels of retention, it was available in few places (Pang & Hao, 2007; Yang et al., 2008). Interviewees proposed the provision of psychological services and did not mention knowing of available counselors; the Chinese government

reports that by July 2006 all MMT clinics had counselors (UNTG, 2007b). This discrepancy could be because though federal guidelines stipulate the provision of certain services, many are newly implemented or still being implemented, and are thus yet unknown or unutilized by IDUs (UNTG, 2007b).

The most commonly discussed barrier was that of law enforcement and fear of arrest. Listing law enforcement as a barrier to accessing harm reduction services has been noted in numerous settings including Russia, China, Canada, Vietnam, and the USA (Cooper, Moore, Gruskin, & Krieger, 2005; Hammett et al., 2005b; Qian et al., 2006; Rhodes et al., 2003; Shannon et al., 2008). This not only limits access to MMT clinics but also to HIV prevention in general as individuals are afraid of spending time in settings where they might be labeled as IDUs (Cooper et al., 2005; Rhodes et al., 2006).

These described barriers highlight a potential conflict within harm reduction and ways in which it is implemented and sustained – whether from a public health or law enforcement perspective. This tension has been noted by other researchers as both a potential barrier and benefit of improving interventions as it can facilitate a better understanding of the requirements and expectations of each side (Hammett et al., 2005b; Hammett et al., 2007; Qian et al., 2006). Studies have also suggested working with the Chinese government – specifically local and provincial leaders – to help increase understanding of drug use and focus on a more treatment oriented approach rather than punishment (Hammett et al., 2007; Qian et al., 2006; Thompson, 2005).

Community awareness and education were repeatedly mentioned by respondents as necessary for increasing attendance and retention rates in methadone clinics. These suggestions took many forms: providing general explanations of MMT, working with community leaders, and linking MMT to other services. Other studies have found levels of awareness and understanding among IDUs regarding the availability and benefits of harm reduction as a strong determinant of participation (Philbin et al., 2008; Tkatchenko-Schmidt et al., 2008; Yang et al., 2008). Some drug users and NGO members stated support for total abstinence. One method to incorporate this could be to emphasize that, though methadone still involves an opiate substitute, participation also increases links to other services, which can facilitate cessation (Hagan et al., 2000; Henderson, Vlahov, Celentano, & Strathdee, 2003; Wood et al., 2007).

A limitation of this study is that some interviewees did not have extensive knowledge of harm reduction interventions, making it difficult to form

an opinion of this multifaceted intervention after hearing only a brief description. Although we conducted interviews across various organizations, and varied between those who interacted daily with IDUs and higher-level coordinators, we were limited to interviewing those who consented. For example, we were unable to interview any police or detention facility personnel. In addition, there were some discrepancies in reported service provision between federal policy and what was implemented at a local level. Also, certain specific responses such as beliefs regarding methadone's side effects, police policy, or existing services were not explored specifically to ascertain how they were developed. This study was only conducted in one city in southern China, but as the results align with existing studies from other countries we believe this can be beneficial to China as a whole. Though we did not use a theoretical sampling framework, certain themes were repeatedly mentioned by different participants, suggesting that the data had reached saturation and the results were meaningful.

Our results suggest that though the Chinese Ministry of Health's support of harm reduction – resulting in the rapid scale-up of MMT clinics – has been a positive step forward, additional work needs to be done. Interviewees believe it is crucial to address an underlying wariness of methadone, and to have the policy makers, public security bureau, and NGOs increase their levels of coordination to help facilitate the privacy of IDUs attending these clinics, and lower their fears of arrest. Facilitating dialogue, collaboration, and discussion between these groups, and understanding the needs of each, may move critical interventions forward. In the meantime, the existing MMT clinics throughout China will continue to provide services to IDUs in the effort to lower rates of drug use and help stem China's HIV epidemic.

Acknowledgements

This research was funded through the first author's Fulbright Grant through the Institute for International Education, and by support from the Chinese Center for Disease Control: National Center for AIDS and STDs. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Chinese Center for Disease Control. The authors gratefully acknowledge the contributions of study participants and Daytop staff in Kunming, China for assistance with data collection, Wang LiMing for her help translating the questionnaire, Ted Hammett for his thoughtful comments, and to the students in the Medical Anthropology Seminar and Kumi Smith for their edits and support throughout this entire process.

References

- Chen, H. (2007). *The grim situation of Yunnan Province's HIV/AIDS prevention: Over 30,000 estimated cumulative AIDS cases*. Retrieved September 10, 2008, from www.xinhaunet.com.
- China Ministry of Health (2001). *Ministry of Health: National HIV/AIDS Surveillance Report 1998–2000*. Beijing, China: National Center on AIDS and STDs.
- Chu, T., & Levy, J. (2005). Injection drug use and HIV/AIDS transmission in China. *Cell Research*, 15, 865–869.
- Cooper, H., Moore, L., Gruskin, S., & Krieger, N. (2005). The impact of a police drug crackdown on drug injectors' ability to practice harm reduction: A qualitative study. *Social Science and Medicine*, 61, 673–684.
- Des Jarlais, D., Paone, D., Friedman, S., Peyser, N., & Newman, R. (1995). Regulating controversial programs for unpopular people: Methadone maintenance and syringe exchange programs. *American Public Health Association*, 85, 1577–1584.
- Drucker, E., Lurie, P., Wodak, A., & Alcibes, P. (1998). Measuring harm reduction: The effects of needle and syringe exchange programs and methadone maintenance on the ecology of HIV. *AIDS*, 12(Suppl. A), S217–S230.
- Firestone-Cruz, M., Mantsios, A., Ramos, R., Case, P., Brouwer, K., & Ramos, M. (2006). A qualitative exploration of gender in the context of injection drug use in two-US–Mexico border cities. *AIDS and Behavior*, 11(2), 253–262.
- Hagan, H., McGough, J., Thiede, H., Hopkins, S., Duchin, J., & Alexander, E. (2000). Reduced injection frequency and increased entry and retention in drug treatment associated with needle-exchange participation in Seattle drug injector. *Journal of Substance Abuse Treatment*, 19(3), 247–252.
- Hammett, T., Bartlett, N., Chen, Y., Ngu, D., Cuong, D., Phuong, N., et al. (2005a). Law enforcement influences on HIV prevention for injection drug users: Observations from a cross-border project in China and Vietnam. *International Journal of Drug Policy*, 16(4), 235–245.
- Hammett, T., Des Jarlais, D., Liu, W., Ngu, D., Tung, N., Hoang, T., et al. (2003). Development and implementation of a cross-border HIV prevention intervention for injection drug users in Ning Ming County (Guangxi Province), China and Lang Son Province, Vietnam. *International Journal of Drug Policy*, 14(5–6), 389–398.
- Hammett, T., Norton, G., Kling, R., Liu, W., Chen, Y., Ngu, D., et al. (2005b). Community attitudes toward HIV prevention for injection drug users: Finding from a cross-border project in Southern China and Northern Vietnam. *Journal of Urban Health*, 82(3 Suppl. 4), iv34–iv44.
- Hammett, T., Wu, Z., Duc, T., Stephens, D., Sullivan, S., Liu, W., et al. (2007). Social evils' and harm reduction: The evolving policy environment for human immunodeficiency virus prevention among injection drug users in China and Vietnam. *Addiction*, 103, 137–145.
- Henderson, L., Vlahov, D., Celentano, D., & Strathdee, S. (2003). Readiness for cessation of drug use among recent attenders and nonattenders of a needle exchange program. *Journal of Acquired Immune Deficiency Syndromes*, 32(2), 229–237.
- Joseph, H., Stancliff, S., & Langrod, J. (2000). Methadone maintenance treatment: A review of historical and clinical issues. *Mt. Sinai Journal of Medicine*, 67(5–6), 347–364.
- Kitsenko, G., Shakhov, A., Lazzarini, Z., Case, P., Chintalova-Dallas, R., & Burris, S. (2008, May 11–15). *Harm reduction training in law schools in Ukraine*. Paper presented at the 19th International Harm Reduction Conference, Barcelona, Spain.
- Kozachenko, N., Darbekova, G., Mingazova, I., Burris, S., Case, P., & Chintalova-Dallas, R. (2008, May 11–15). *Evaluation of drug policy and HIV/AIDS prevention programs in Kazakhstan (Temirtau and Shymkent): Summary of RPAR results*. Paper presented at the 19th International Harm Reduction Conference, Barcelona, Spain.
- Lazzarini, Z., Case, P., Burris, S., & Chintalova-Dallas, R. (2007, May 13–17). *Three easy policy changes to improve the risk environment for IDUs in Eastern Europe and the Former Soviet Union*. Paper presented at the 18th International Harm Reduction Conference, Warsaw, Poland.
- Lu, L., Zhao, D., Bao, Y., & Shi, J. (2008). Methadone maintenance treatment of heroin abuse in China. *The American Journal of Drug and Alcohol Abuse*, 34(2), 127–131.
- Malcolm, S. (2003). An examination of HIV/AIDS patients who have excellent adherence to HAART. *AIDS Care*, 15, 251–261.
- Muhr, T. (2004). *Atlas.ti – The knowledge workbench. Visual qualitative data analysis management model building*. Berlin, Germany: Scientific Software Development.
- National Center for AIDS and STDs (NCAIDS) (2008). *Scaling up the methadone maintenance treatment program in China*. Retrieved September 15, 2008. http://www.unaids.org.cn/en/index/Document_view.asp?id=295
- Pang, L., & Hao, Y. (2007). Effectiveness of the first eight methadone maintenance treatment clinics in China. *AIDS*, 21(8), S103–S109.
- Peles, E., Schreiber, S., & Adelson, M. (2006). Factors predicting retention in treatment: 10-year experience of a methadone maintenance treatment (MMT) clinic in Israel. *Drug and Alcohol Dependence*, 82, 211–217.
- Philbin, M., Mantsios, A., Lozada, R., Case, P., Pollini, R., Alvelais, J., et al. (2008). Exploring stakeholder perceptions of acceptability and feasibility of needle exchange programmes, syringe vending machines and safer injection facilities in Tijuana, Mexico. *International Journal of Drug Policy*, 20(4), 329–335.
- Powell-Cope, G., White, J., Henkelman, E., & Turner, B. (2003). Qualitative and quantitative assessments of

- HAART adherence of substance-abusing women. *AIDS Care*, 15(2), 239–249.
- Powers, R. (1998). The role of qualitative research in HIV/AIDS. *AIDS*, 12(7), 687–695.
- Qian, H., Schumacher, J., Chen, H., & Ruan, Y. (2006). Injection drug use and HIV/AIDS in China: Review of current situation, prevention, and policy implication. *Harm Reduction Journal*, 3, 4–12.
- Reid, G., & Costigan, G. (2002). *Revisiting "The hidden epidemic": A situation assessment of drug use in Asia in the context of HIV/AIDS*. Melbourne, Australia: Centre for Harm Reduction, Burnet Institute.
- Rhodes, T., Kimber, J., Small, W., Fitzgerald, J., Kerr, T., & Hickman, M. (2006). Public injecting and the need for safer environment interventions; in the reduction of drug related harm. *Addiction*, 101(10), 1384–1393.
- Rhodes, T., Mikhailova, L., Sarang, A., Lowndes, C., Rylkov, A., Khutorskoy, M., et al. (2003). Situational factors influencing drug injecting, risk reduction and syringe exchange in Togliatti City, Russian Federation: A qualitative study of micro risk environment. *Social Science and Medicine*, 57(1), 39–54.
- Rhodes, T., Singer, M., Bourgois, P., Friedman, S., & Strathdee, S. (2005). The social structural production of HIV risk among injecting drug users. *Social Science and Medicine*, 61(5), 1026–1044.
- Shannon, K., Rusch, M., Shoveller, J., Alexson, D., Gison, K., & Tyndall, M. (2008). Mapping violence and policing as an environmental-structural barrier to health service and syringe availability among substance-using women in street-level sex work. *International Journal of Drug Policy*, 19(2), 140–147.
- Sobeyko, J., Duklas, T., Parczewski, M., Leszczyszyn-Pynka, M., Bejnarowicz, P., & Lazzarini, Z. (2007, May 13–17). *After the rapid policy and response process: Drug policy change in Szczecin, Poland*. Paper presented at the 18th International Harm Reduction Conference, Warsaw, Poland.
- Sullivan, L., Metzger, D., Fudala, P., & Fiellin, D. (2005). Decreasing international HIV transmission: The role of expanding access to opioid agonist therapies for injection drug users. *Addiction*, 100(2), 150–158.
- Sullivan, S., & Wu, Z. (2007). Rapid scale up of harm reduction in China. *International Journal of Drug Policy*, 18(2), 118–128.
- Tashima, N., Crain, C., O'Reilly, K., & Elifson, C. (1996). The Community Identification (CID) process: A discovery model. *Quantitative Health Research*, 6(1), 23–48.
- Tempalski, B., Flom, P., Friedman, S., DesJarlais, D., Friedman, J., McKnight, C., et al. (2007). Social and political factors predicting the presence of syringe exchange programs in 96 US metropolitan areas. *American Journal of Public Health*, 97(3), 437–447.
- Thompson, D. (2005). The 'People's War' against drug and HIV/AIDS. *China Brief*, 5(14), 6–7.
- Tkatchenko-Schmidt, E., Renton, A., Gevorgyna, R., Kavydenko, L., & Atun, R. (2008). Prevention of HIV/AIDS among injecting drug users in Russia: Opportunities and barriers to scaling-up of harm reduction programmes. *Health Policy*, 85(2), 162–171.
- UNTG, U.N.E.T.G. (2007a). *HIV/AIDS China's titanic peril*. Retrieved March 10, 2009, <http://www.gateway2china.com/report/AIDSchina2001update.pdf>
- UNTG, U.N.E.T.G. (2007b). *Resource: A joint assessment of HIV/AIDS prevention and care in China*. Retrieved March 10, 2009, http://aidsportal.org/Article_Details.aspx?ID=3678
- Vyshemirskaya, I., Osipenko, V., Burkhanova, O., Lazzarini, Z., Burris, S., & Chintalova-Dallas, R. (2008, May 11–15). *Initiating practical health interventions for IDUs in Kaliningrad, Russia: Results of a rapid policy assessment and response (RPAR)*. Paper presented at the 19th International Harm Reduction Conference, Barcelona, Spain.
- Wood, E., Kerr, T., Tyndall, M., Zhang, R., Hogg, R., Strathdee, S., et al. (2007). Rates of HIV/AIDS care and antiretroviral therapy response among active injection drug user. *Addiction*, 102(9), 1503–1505.
- Yang, L., Li, J., Zhang, Y., Li, H., Zhang, W., & Dai, F.Q. (2008). Societal perception and support for methadone maintenance treatment in a Chinese province with high HIV prevalence. *The American Journal of Drug and Alcohol Abuse*, 34(1), 5–16.
- Zheng, X., Zhang, J., & Qu, S. (1997). A cohort study of HIV infection among intravenous drug users in Ruili and other two counties in Yunnan Province, China, 1992–1995. *Chinese Journal of Epidemiology*, 18(5), 259–262.

Copyright of AIDS Care is the property of Routledge and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.