Women involved in prostitution and problem substance use Rapid Evidence Assessment (REA)

Centre for Applied Social Research

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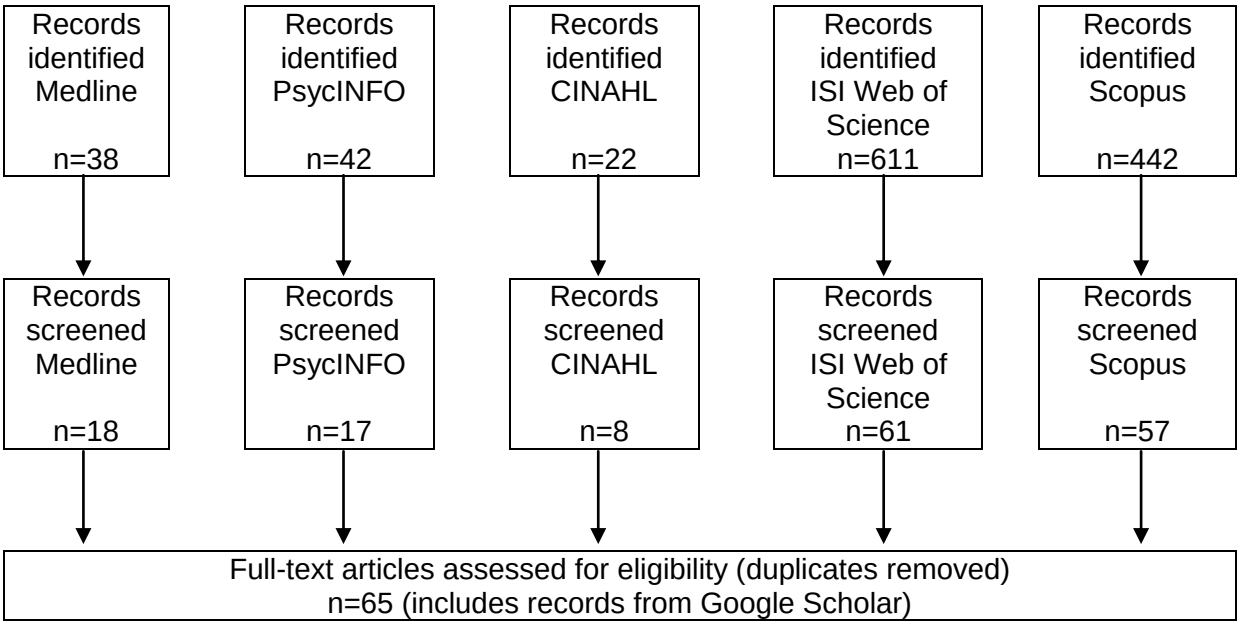
Medline, PsycINFO, CINAHL, ISI Web of Science and Scopus were searched using variations of the following search: Prostitution AND substance abuse) AND (access OR harm reduction OR treatment OR talking therapy. This search was limited to English language and the years 1997-2012. In addition, Google Scholar was searched and the first 50 hits were reviewed, resulting in an additional 12 potential abstracts for consideration. In total, 65 articles were reviewed (Figure 1) and a summary of each article is presented.

Figure 1. Recovery among women involved in prostitution – searches from 5 databases



DRUGSCOPE PAPERS (alphabetical)

Record	Author	Year	Title	Database
1.	Baker	2010	Exiting Prostitution: An Integrated Model	WEB of Science
2.	Bellis	2007	Comparative views of the public, sex workers, businesses and residents on establishing managed zones for prostitution: Analysis of a consultation in Liverpool	WEB of Science
3.	Bernette	2008	Prevalence and health correlates of prostitution among patients entering treatment for substance use disorders	SCOPUS
4.	Bowser	2008	Outreach-based drug treatment for sex trading women: The Cal-Pep risk-reduction demonstration project	PsycINFO & CINAHL & WEB of Science & SCOPUS
5.	Braine	2006	Patterns of sexual commerce among women at US Syringe Exchange Programs	SCOPUS
6.	Cavazos-Rehg	2009	Risky Sexual Behaviors and Sexually Transmitted Diseases: A Comparison Study of Cocaine-Dependent Individuals in Treatment versus a Community-Matched Sample	WEB of Science
7.	Cohan	2006	Sex worker health: San Francisco style	WEB of Science
8.	Copenhaver	2006	Behavioral HIV risk reduction among people who inject drugs: Meta-analytic evidence of efficacy	WEB of Science
9.	Copeland	1992	A comparison of women seeking drug and alcohol treatment in a specialist women's and two traditional mixed-sex treatment services	Google scholar
10.	Cusick	2006	Widening the harm reduction agenda: From drug use to sex work	WEB of Science
11.	Deering	2011a	A peer-led mobile outreach program and increased utilization of detoxification and residential drug treatment among female sex workers who use drugs in a Canadian setting	PsycINFO & MEDLINE & CINAHL & WEB of Science SCOPUS
12.	Deering	2011 b	The street cost of drugs and drug use patterns: Relationships with sex work income in an urban Canadian setting	SCOPUS
13.	Deering	2009	Piloting a peer-driven intervention model to increase access and adherence to antiretroviral therapy and hiv care among street-entrenched HIV-positive women in Vancouver	SCOPUS
14.	El-Bassel	2012	Dual HIV risk and vulnerabilities among women who use or inject drugs: No single prevention strategy is the answer	MEDLINE & Web of Science & SCOPUS

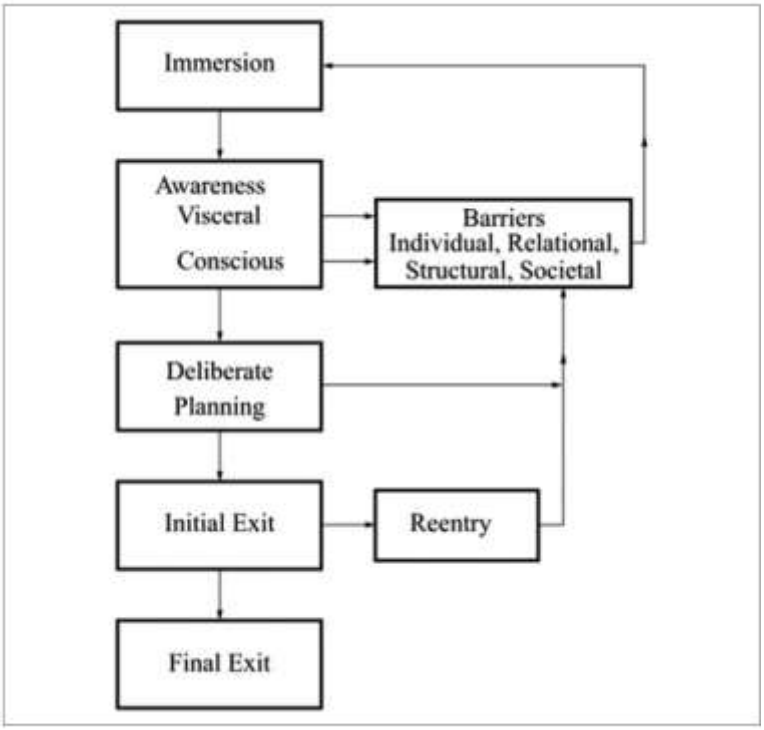
Record	Author	Year	Title	Database
15.	Eiroa-Orosa	2010	Implication of Gender Differences in Heroin-Assisted Treatment: Results from the German Randomized Controlled Trial	WEB of Science
16.	Goldenburg	2012	Exploring the impact of underage sex work among female sex workers in two Mexico-us border cities	SCOPUS
17.	Gronbladh	2010	Adherence and social antecedents in relation to outcome in Methadone Maintenance Treatment (MMT)	WEB of Science
18.	Hocking	2006	'As a prostitute you don't exist...'	CINAHL
19.	Janssen	2009	Peer Support using a Mobile Access Van Promotes Safety and Harm Reduction Strategies among Sex Trade Workers in Vancouver's Downtown Eastside	WEB of Science & SCOPUS
20.	Jeal	2007	Health needs and service use of parlour-based prostitutes compared with street-based prostitutes: a cross-sectional survey	WEB of Science& SCOPUS
21.	Johnson	2006	Drug use by incarcerated women offenders	WEB of Science
22.	Kimber	2008	Process and predictors of drug treatment referral and referral uptake at the Sydney Medically Supervised Injecting Centre	WEB of Science
23.	Kimber	2007	Shooting gallery operation in the context of establishing a medically supervised injecting center: Sydney, Australia	WEB of Science
24.	Kurtz	2005	Barriers to health and social services for street-based sex workers	WEB of Science & SCOPUS
25.	Lau	2008	Comparing HIV-related syringe-sharing behaviors among female IDU engaging versus not engaging in commercial sex	SCOPUS
26.	Litchfeild	2010	Can a targeted GP-led clinic improve outcomes for street sex workers who use heroin?	SCOPUS
27.	Lloyd-Smith	2010	Assisted injection in outdoor venues: an observational study of risks and implications for service delivery and harm reduction programming	WEB of Science
28.	Luseno	2010	Health Services Utilization Among South African Women Living with HIV and Reporting Sexual and Substance-Use Risk Behaviors	WEB of Science
29.	Marchand	2012	Sex work involvement among women with long-term opioid injection drug dependence who enter opioid agonist treatment	WEB of Science & SCOPUS
30.	McLean	2006	Release from jail: Moment of crisis or window of opportunity for female detainees?	WEB of Science

Record	Author	Year	Title	Database
31.	Mehrabadi	2008	The Cedar Project: A comparison of HIV-related vulnerabilities amongst young Aboriginal women surviving drug use and sex work in two Canadian cities.	PsycINFO & MEDLINE & CINAHL & WEB of Science & SCOPUS
32.	Miller	2011	Individual and structural vulnerability among female youth who exchange sex for survival	SCOPUS
33.	Moore	2009	'Workers', 'clients' and the struggle over needs: Understanding encounters between service providers and injecting drug users in an Australian city	SCOPUS
34.	Murphy	2010	Understanding the social and economic contexts surrounding women engaged in street-level prostitution.	MEDLINE
35.	Nguyen	2008	Why and according to what consultation profiles do female sex workers consult health care professionals? A study conducted in Laval, Quebec	WEB of Science
36.	Nuttbrock	2004	Linking female sex workers with substance abuse treatment.	MEDLINE & WEB of Science & SCOPUS, Google scholar
37.	Reback	2012	Prevention case management improves socioeconomic standing and reduces symptoms of psychological and emotional distress among transgender women.	CINAHL
38.	Rekart	2005	Sex-work harm reduction.	MEDLINE & WEB of Science & SCOPUS
39.	Reynolds	2006	Follow-up for medical care among drug users with hepatitis C	WEB of Science
40.	Rodgers	2012	The Kirketon Road Centre Improving access to primary care for marginalised populations	WEB of Science & SCOPUS
41.	Roxburgh	2008	Drug dependence and associated risks among female street-based sex workers in the greater Sydney area, Australia	WEB of Science
42.	Roxburgh	2005	Drug use and risk behaviours among injecting drug users: A comparison between sex workers and non-sex workers in Sydney, Australia	SCOPUS
43.	Schroeder	2006	Changes in HIV risk behaviors among patients receiving combined pharmacological and behavioral interventions for heroin and cocaine dependence.	PsysINFO & MEDLINE
44.	Semple	2011	Correlates of trading sex for methamphetamine in a sample of HIV-negative heterosexual methamphetamine users.	MEDLINE & WEB of Science

Record	Author	Year	Title	Database
45.	Shannon	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	CINAHL & WEB of Science & SCOPUS
46.	Shannon	2005	Access and utilization of HIV treatment and services among women sex workers in Vancouver's Downtown Eastside	SCOPUS
47.	Sherman	2006	The evaluation of the JEWEL project: An innovative economic enhancement and HIV prevention intervention study targeting drug using women involved in prostitution	WEB of Science
48.	Simpson	2008	Different needs: Women's drug use and treatment in the UK	Google scholar
49.	Smith	2007	Barriers to effective drug addiction treatment for women involved in street-level prostitution: a qualitative investigation	Google scholar
50.	Spice	2007	Management of sex workers and other high-risk groups	SCOPUS
51.	Strathdee	2012	The Emerging HIV Epidemic on the Mexico-U.S. Border: An International Case Study Characterizing the Role of Epidemiology in Surveillance and Response	WEB of Science
52.	Strathdee	2009	Predictors of sexual risk reduction among Mexican female sex workers enrolled in a behavioral intervention study	SCOPUS
53.	Strathdee	2008	Correlates of injection drug use among female sex workers in two Mexico-U.S. border cities	SCOPUS
54.	Striley	2008	Health care disparities among out-of treatment cocaine users in St. Louis.	MEDLINE
55.	Surrat	2012	Foster care history and HIV infection among drug-using African American female sex workers	SCOPUS
56.	Surratt	2010	An effective HIV risk-reduction protocol for drug-usng female sex workers.	PsycINFO& MEDLINE & SCOPUS
57.	Sun	2006	Program factors related to women's substance abuse treatment retention and other outcomes: A review and critique	WEB of Science
58.	Taylor	2011	The sexual victimization of women: Substance abuse, HIV, prostitution, and intimate partner violence as underlying correlates.	PsycINFO
59.	Tucker	2011	Predictors of substance abuse treatment need and receipt among homeless women	WEB of Science

Record	Author	Year	Title	Database
60.	Van der Bosch	2007	Patients with addiction and personality disorder: treatment outcomes and clinical implications	WEB of Science
61.	Van de Poel	2006	Drug users' participation in addiction care: Different groups do different things	WEB of Science
62.	Ward	2009	Assessing the effectiveness of a trauma-oriented approach to treating prostituted women in a prison and a community exiting program	SCOPUS
63.	Wechsberg	2009	Substance abuse, treatment needs and access among female sex workers and non-sex workers in Pretoria, South Africa.	PsycINFO & MEDLINE & WEB of Science & SCOPUS
64.	Wechsberg	2006	Substance use, sexual risk, and violence: HIV prevention intervention with sex workers in pretoria	SCOPUS
65.	Whitaker	2011	Stigmatization Among Drug-Using Sex Workers Accessing Support Services in Dublin	WEB of Science

Record	1
Author/s	Lynda M. Baker, Rochelle L. Dalla, Celia Williamson
Title	Exiting Prostitution: An Integrated Model
Journal and page numbers	Violence Against Women 16(5) 579– 600
Year of publication	2010
Country where research took place	Review
Recruitment site	n/a
Sample description	n/a
Key findings (relevant to the project)	Despite the value inherent in each of the four models discussed, neither the general nor the specific models encompasses all the possible avenues out of prostitution. Based on the four models, the prostitution literature, and our experience with women involved in street-level prostitution, we have developed an integrated model with 6 stages (see picture). Stage 1: *immersion*, is seen as the starting point wherein a woman is totally immersed in prostitution and has no thoughts of leaving or any conscious awareness of the need to change (similar to *pre contemplation* (Prochaska et al., 1992)). Stage 2: *awareness* is comprised of two parts. *Visceral awareness* refers to the gradual realization that all is not as it used to be, and *Conscious awareness* occurs when these uneasy feelings reach a woman's conscious level. She acknowledges her feelings and begins to process them consciously thereby enabling her to verbalize what she had previously felt at the gut level. *Stage 3: deliberate preparation:* Here, a woman begins assessing both formal and nformal support resources. It is in this stage that she is most likely to make initial contact with formal support providers (e.g., treatment centers, support groups) available within her community and to speak with family and friends about life "on the outside." Thus this stage is characterized by cognitive processing as well as data and information gatherin*g.* Again, given individual variability and personal initiative, length of time spent in this stage could vary dramatically. It is important to point out, however, that the woman may be acting on her own accord (i.e., personal desire to exit) or may be forced by others (e.g., family, children's services, the criminal justice system) to start planning her exit. The *initial exit* stage is when the woman begins actively using informal (e.g., moving in with a family member) and formal (e.g., attending counseling, entering de-tox) support services (similar to *action* and *maintenance* (Prochaska et al., 1992)) For the woman who returns to prostitution, the next stage in our model, *reentry,* parallels Sanders' (2007) *yo-yoing* and *reactionary* transitions. *Reentry* into street-based prostitution may result, yet again, in a complete re*immersion* in the street-level sex industry. It is important to point out that after *reentry,* two pathways in a woman's developmental experiences with the exit process are posible. Te last stage, *final exit* They contend that *maintenance* is reached after a particular period of time (i.e., 6 months of behavior change). Given the myriad barriers a prostituted woman must overcome to exit successfully, in addition to the heterogeneity of any woman's movement

	through the stages (i.e., just once or a series of exit-reentry cycles), we do not believe this stage can, or should, be defined by a specific length of time.
	 **Figure 1.** An integrated model
Implications of findings/ conclusions	Is it necessary to have a model for leaving the streets? A model is necessary because, overall, it promotes a better understanding of the complexity of the exiting process. It also provides a structure for research, education, and practice. Research; a considerable amount of research on this phenomenon is not guided by or conducted with in a theoretical framework, making the results non generalizable. A model has been described as "an analogy or example that is used to help visualize and understand something that cannot be directly observed or about which little is known" Education: human service providers (e.g., health care professionals, social workers, substance abuse counselors, religious leaders, and outreach workers) are on the frontlines and are most likely to work directly with women attempting to exit street based prostitution. It is imperative that they be educated about the exit process. Practice: use the model to create assessment tools and interventions that are not only stage specific but also address each woman's specific needs. The result of these efforts is a comprehensive model that not only has direct implications for continued research, education, and practice but also provides a common structure and knowledge base for moving the field forward.
Limitations of research	The integrated model is based on our experiences with women in street-level prostitution and on our extensive reading of the research literature. Therefore, it is geared only toward these women and does not address the needs of women in different types of prostitution, or men or transgendered people in prostitution. More research is needed on all people in prostitution to gain a better understanding of the strategies they use to exit sex work.
Relevant to review aim	Yes

Record	2
Author/s	Mark A. Bellis, Fay L.D. Watson, Sara Hughes, Penny A. Cook, Jennifer Downing, Peter Clark, Rod Thomson
Title	Comparative views of the public, sex workers, businesses and residents on establishing managed zones for prostitution: Analysis of a consultation in Liverpool
Journal and page numbers	Health & Place 13, 603–616
Year of publication	2007
Country where research took place	Liverpool, UK
Recruitment site	**Street sex workers N=50** were identified through sampling all sex workers seen working in known areas for soliciting in Liverpool. Areas were identified from information provided by police officers, residents' associations and through existing knowledge from previous research. **On-line questionnaires N=789** To publicize the website and consultation, 5000 leaflets were distributed throughout the city. The site and consultation were also advertised in the local newspapers and promoted through other media (primarily radio and some television). **Residents' questionnaires N=179:** Representatives from residents' associations, Community forums and non-statutory organizations from areas affected by street prostitution. Through a snowballing approach such individuals encouraged other affected individuals to complete questionnaires. **Businesses N=51** local businesses were contacted through the local Chamber of Commerce. Businesses were invited to attend an initial general meeting and a later presentation and discussion (19th May 2004), during which questionnaires were distributed and completed.
Sample description	Most sex workers were aged between 26 and 35 years and over 90% were 16 or over when they began sex work. Over 85% had used heroin in the past 4 weeks and three quarters had used crack cocaine. Two thirds had been in contact with a drug treatment centre in the last 12 months and just over 60% had seen a general practitioner (GP). However, while the vast majority of women contacting drug services disclosed their sex work far fewer did so to GPs. Nearly three quarters of women had been in contact with the local outreach services for sex workers. Just under half of women had ever been arrested for prostitution, soliciting or a related offence while over two thirds had been physically or sexually assaulted while working.
Key findings (relevant to the project)	All groups believed a zone would improve sex workers' safety and reduce prostitution elsewhere. Sex workers (96%) agreed to work in a zone. The results from stage 1 (preferred characteristics of a managed zone were primarily: away from residential areas and night time businesses; in light industrial, inner city areas and accessible by public

	transport), were used to identify potential areas. Affected residents and those answering on-line and indicating that they lived in areas affected by prostitution also believed that a zone would reduce sex work outside of the area and most were strongly in favour of establishing one. Two areas were identified that were light industrial zones. Both areas were suitable for security measures to be implemented (good lighting and CCTV was present or could be installed; entry into the zone could be monitored by wardens or police) and there were either council owned buildings available to provide health and social services or ample parking space from which a mobile unit could operate. Both areas had adequate street and pavement from which sex workers could attract clients and both had a parking area that could be used as a finishing off zone. Over half of the stage 2 businesses agreed in principle to having a managed zone in Liverpool and most were both aware of, and had no objection to, proposed security measures. On average both areas thought safety of premises would change little from the introduction of a zone but both also believed that business would get worse. Overall, most businesses (the vast majority of which operated in day time) identified that they were never going to be in favour of having a managed zone in their area, with area 1 (the area already affected by prostitution) being most strongly (although not significantly so) against the proposal.
Implications of findings/ conclusions	This consultation has identified broad agreement that a managed zone would be an effective way to generate such improvements. Such long term goals require work with individuals before they enter the sex trade to prevent child abuse and services for looked after children (who are also at greater risk). Some such measures are present in the new strategy for tackling prostitution in England and Wales. However, while such measures take effect other interventions must be established to protect the health of existing sex workers and the communities in which they work. This consultation has identified that (at least in Liverpool) there is public, political and professional support for a new way of tackling prostitution through a managed zone approach. Clearly, there may be some issues about location of and confidence in such a zone, especially for businesses located in any managed zone. Without national permission for such locally supported initiatives, the exact benefits that managed zones could bring to reducing both the abuse of sex workers and the antisocial effects of prostitution on communities will remain unrealised.
Limitations of research	Not reported
Relevant to review aim	No

Record	3
Author/s	Mandi L. Bernette, Emma Lucas, Mark Ilgen, Susan M. Frayne, Julia Mayo, Julie C. Weitlauf
Title	Prevalence and Health Correlates of Prostitution Among Patients Entering Treatment for Substance Use disorders
Journal and page numbers	Arch Gen Psychiatry. 65(3):337-344
Year of publication	2008
Country where research took place	United States
Recruitment site	78 SUD treatment facilities distributed across the country. At smaller facilities, all of the patients were eligible to participate, whereas at larger sites, a random sample was recruited. Overall, 84.7% of eligible patients agreed to participate and provided informed consent. 15 participants (n=3 women, n=12 men) who declined to provide information on prostitution history were also excluded, resulting in a sample of 4607 participants (n=1606 women, n=3001 men).
Sample description	Women were: younger age; entry into inpatient or residential treatment; non-Hispanic black ethnicity; lower education level; homelessness; and crack, polysubstance, and IV drug use. Women with a lifetime history of prostitution were more likely to report CSA (Childhood sexual abuse). Men endorsing a lifetime history of prostitution were characterized by the following: older age; entry into inpatient or residential treatment; non-Hispanic black ethnicity; homelessness; and crack and/or cocaine, polysubstance, and IV drug use. Men endorsing a lifetime history of prostitution were also more likely to report exposure to CSA.
Key findings (relevant to the project)	Many participants reported prostitution in their lifetime (50.8% of women and 18.5% of men) and in the past year (41.4% of women and 11.2% of men). Prostitution was associated with use of inpatient mental health services; mental health conditions (anxiety, psychotic symptoms, depression and lifetime history of suicide attempt in the past year); general physical health problems (respiratory, circulatory, and neurological) in men. Prostitution was associated with use of emergency care and Hepatitis in women. When Gender-stratified logistic regression analyses (adjusted for age and CSA) were conducted in which the 2 measures of substance use (number of problem substances reported and days in which alcohol was consumed in the past month) the pattern of the associations remained unchanged. No further significant associations between prostitution and health when Gender-stratified logistic regression analyses (adjusted for age and CSA) were conducted in which individuals who had engaged in prostitution more than 20 times in the past year (n=61 men, n=266 women) were compared with those without a lifetime history of prostitution. The associations between prostitution and HIV or AIDS and hepatitis were accounted for by the increased prevalence of IV drug use. Prostitution remained associated with HIV or AIDS among women and men. Prostitution was no longer associated with hepatitis in women, and the relationship between prostitution and hepatitis remained

	unaltered for men.
Implications of findings/ conclusions	Our findings highlight needs to increase awareness of prostitution within SUD treatment settings and to incorporate such knowledge into treatment planning. The screening of individuals entering SUD treatment for involvement with prostitution may improve public health and allow for more comprehensive treatment. Interventions could also be informed by research aimed at understanding the needs of individuals seeking treatment for SUD who report involvement in prostitution. Future studies aiming to delineate the independent influence of prostitution on mental and physical health should incorporate knowledge of CSA and substance use (particularly IV drug use and crack use) while considering other factors that may negatively affect health among this population.
Limitations of research	-Lacked of temporal information regarding when prostitution began and could not assess the nature of the association between cocaine or crack use and prostitution. -Didn't asses the severity of depression rather than the presence or absence of depressive symptoms -More data needed on the rationale that women and men use when seeking specific health services (eg, cost, availability) -Sample represents individuals entering SUD programs and findings cannot be extended to individuals without SUD or to those with SUD who do not present for treatment. -Data collection took place in 1993, and while there is no reason to believe that the fundamental relationships discussed between prostitution, mental health, and physical health have changed with the passage of time, some aspects of patient behavior (eg, drug of choice) may have changed. -More information about the context of prostitution (eg, age at onset, temporal relationship to substance use, client population) would be of great utility. -More detailed and extensive assessment of the breadth (ie, cognitive vs physical symptoms, sadness vs agitation) and severity of anxiety and depression is needed.
Relevant to review aim	Partially

Record	3
Author/s	Caryl Beynon, Mark A. Bellis, Tim Millar, Petra Meier, Rod Thomson, Kevin Mackway Jones
Title	Hidden need for drug treatment services: measuring levels of problematic drug use in the North West of England
Journal and page numbers	Journal of Public Health Medicine, Vol 23, num 4, 286-291
Year of publication	2001
Country where research took place	North West of England, UK
Recruitment site	5 North West health authorities and one local authority. The sources of data were Drug treatment agencies, police and probation. For Manchester, accident and emergency data replaced probation.
Sample description	Utilizing surveillance data and capture–recapture techniques we estimate the rates of problematic drug users by age and sex in five North West health authorities and one local authority.
Key findings (relevant to the project)	Analyses show concentrations of problematic drug use in large metropolitan areas (Liverpool and Manchester) with levels as high as 34.5 and 36.5 per 1000 population (ages 15–44), respectively, and, for males, levels exceed 50 per 1000 in three authorities. Patterns of prevalence for those aged 25 and over differed from those in the younger age groups, with disproportionate levels of young users outside metropolitan areas. The proportion of young users already in treatment (21.3 per cent) was lower (older users, 35.3 per cent), with overall proportions in treatment varying between health authorities (range 26.2–46.5 per cent)
Implications of findings/ conclusions	With a multi-agency approach, established monitoring systems can be used to measure hidden populations of drug users. Estimates of the current populations of such users in the North West of England suggest that planned increases of people in treatment by 100 per cent would fail to accommodate even current level of problematic users. A holistic approach to new initiatives must ensure that the high level of relapse once drug users are discharged are reduced and that the needs of young users are addressed before prolonged treatment is required.
Limitations of research	Excluded from review as: Does not refer to sex workers in the results and conclusions**.**
Relevance to review	No

Record	4
Author/s	Benjamin P. Bowser, Lisa Ryan, Carla Dillard Smith, Gloria Lockett
Title	Outreach-based drug treatment for sex trading women: The Cal-Pep risk-reduction demonstration Project
Journal and page numbers	International Journal of Drug Policy, 19 492–495
Year of publication	2008
Country where research took place	California, US
Recruitment site	Drug-using women were recruited in cohorts of 37 from April 2001 through March 2006. Recruitment was done by Cal-Pep outreach workers from street locations in Oakland where Black sex traders and drug users congregate. Prospective clients were directed to the program house. The program operated during the day and consisted of meals, HIV and drug use risk reduction education sessions, group discussions and one-on-one psychological counselling. After 12 months of services, clients completed the program a new cohort of 37 was recruited. Program participants who stopped coming to the program house or who missed outside referrals were sought after on the streets by outreach staff and, when possible, returned to the program (numbers not stated).
Sample description	From April 2001 to March 2006, 37 clients per year were interviewed at program entry and after 6 and 12 months to see if the intervention activities had an impact on their drug use and readiness for abstinence drug treatment. 6% of intake clients were African-American; 7% were White and another 7% were Hispanic and Native Americans; there was no statistically significant range in the racial composition of clients. Nor were there significant changes n the average age of clients, their years of education or their total incomes from both legal and illegal sources during the course of treatment. At intake only 7% of clients had part- or full-time jobs.
Key findings (relevant to the project)	The program operated during the day and consisted of meals, HIV and drug use risk reduction education sessions, group discussions and one-on-one psychological counselling. By the 6th and 12th month of clients' progression through the risk-reduction program, they reported a statistically significant reduction in their poly-drug use (cocaine, cannabis, heroin, PCP) in the 30 days prior to their interviews ($p<.000$). There were also significant reductions in poly-drug use with alcohol ($p<.000$) and use of crack cocaine alone ($p<.003$). There was also an added benefit: clients significantly improved their living circumstances from the streets and shelters to rooms and apartments while in the program ($p<.034$). There was no significant improvement in employment. There were also significant reductions in poly-drug use with alcohol and use of crack cocaine alone. There was also an added benefit: clients significantly improved their living circumstances from the

	streets and shelters to rooms and apartments while in the program, clients who reported living on the streets dropped from 13% at intake to 5% by month 6; those living in institutions dropped from 7% to 3% and those in rental apartments or homes increased from 73% to 85% by the sixth month. At intake only 7% of clients had part- or full-time jobs, 6 months later 15% had work and 12 months later 19% had work. There was a significant decline in the number of nights they spent in jail from on average 2.4 nights at intake to 1.2 nights at 6 months and then 0.9 nights at 12 months. Prior research has shown that the higher the service intensity, he more likely a client will complete a program. Clients who were still with the program by he 6-month interview had on average 2.5 case management sessions per month; this number increased significantly to 5.0 sessions per month by the 12-month interview. Index of service intensity was created by adding all the weeks of service for all services for each client. This number came to on average 10.5 sessions per month by the 6-month interview and increased to 18.9 by he 12-month interview. This finding is significant. They did logistic regression where program completion status at the two ollow-up interviews serves as a dependent variable. The independent covariates were months of total service, nights in jail, living arrangements and employment status. In model 1, total services were shown to significantly account for program completion over employment status and living arrangement ($p < .012$). There was the same result in model 2. Again, total services were the only significant variable when used in regression with nights in jail and employment ($p < .012$)
Implications of findings/ conclusions	This intervention shows that a harm reduction intermediate treatment program for actively using drug users can significantly reduce their drug use and improve readiness for full recovery. These program clients had all of the barriers identified by prior research to enrolment in treatment—personal-family issues, child-care custody issues, lack of insurance, suspicion, aversion to abstinence-based treatment programs and limited access to treatment. Once in treatment even while continuing to use drugs these women respond to education, counselling, attention and services. It is no coincidence that the more services they used the more likely they finish the program and reduced their drug use. Greater service intensity was positively associated with treatment completion and longer treatment retention.
Limitations of research	Not reported
Relevant to review aims	Yes

Record	5
Author/s	Naomi Braine, Don C. Desjarlais, Cullen Goldblatt, Cathy Zadoretzky, Charles Turner
Title	Patterns of sexual commerce among women at US Syringe Exchange Programs
Journal and page numbers	Culture, Health & Sexuality,8(4): 289–302
Year of publication	2006
Country where research took place	USA
Recruitment site	18 programmes (Syringe Exchange Programs), representing all regions of the USA except the southeast. Programmes were randomly selected from a stratified list of all known SEPs in the United States of sufficient size and infrastructure to enable data collection on site. Respondents were randomly selected from among programme participants who exchange syringes on any given day, resulting in a representative sample of exchangers. The interviewers used a random number table to select potential participants from those waiting in line to exchange syringes.
Sample description	338 female respondents who reported selling sex, for money or drugs, in the preceding 30 days. LFSWs (Low Frequency Sex Workers) were significantly more likely to have primarily lived in their own home/apartment during the last six months, and less likely to have lived in a shelter or other transitional living situation. However, substantial proportions of both populations reported having been homeless at some point in the last 6 months. LFSWs were also more likely to have had legitimate sources of income; they were more likely to have had a legal job in the last six months, and more likely to have received welfare in the past year. Over one-third of respondents report having had sex with another woman (WSW), and the rates were higher among LFSWs than HFSWs (p=0.07). LFSWs and HFSWs have similar health histories, including rates of HIV and STDs. LFSWs report significantly lower levels than HFSWs of both depression and anxiety symptoms over the last 30 days. They are also significantly more likely to be in drug treatment.
Key findings (relevant to the project)	LFSWs have significantly lower rates of drug use than HFSWs. They report lower rates of injection overall in the last 30 days; 10.3% (vs. 3.8%) did not inject at all, and an additional 26.2% (vs. 10.8%) did not inject every day. In addition, LFSWs were significantly less likely to smoke crack. Rates of injection risk behaviour are similar. LFSWs show a different pattern of participation in commercial sex. HFSW are significantly more likely to report selling sex to men during the last 30 days, and this remains the case when sex-for-money and sex-for-drugs are analysed separately. LFSWs who sell to men are

	less likely to use condoms, in transactions for either money or drugs. Both groups report selling sex to women, and 13% of LFSWs and 6% of HFSWs sold only to women in the last 30 days. Substantial proportions of LFSWs and HFSWs report buying, as well as selling, sex in the last 30 days; LFSWs are more likely to have purchased sex from a man, but there is no significant difference in rates of buying sex from women. When purchasing sex from men, LFSWs are significantly less likely to use condoms than HFSW. 58% of LFSWs (vs. 16% HFSWs) report never using a condom when paying a man money for sex.
Implications of findings/ conclusions	We argue that this data suggests the existence of an array of commercial sexual transactions outside of the socially recognized sex industry, and that social location may affect condom use.
Limitations of research	Not reported
Relevance to review aims	Not about recovery

Record	6
Author/s	Patricia A. Cavazos-Rehg, Edward L. Spitznagel, Mario Schootman, Jaime R. Strickland, Stephanie E. Afful, Linda B. Cottler, Laura Jean Bierut
Title	Risky Sexual Behaviors and Sexually Transmitted Diseases: A Comparison Study of Cocaine-Dependent Individuals in Treatment versus a Community-Matched Sample
Journal and page numbers	AIDS PATIENT CARE and STDs, Volume 23, Number 9
Year of publication	2009
Country where research took place	St. Louis, Missouri, US
Recruitment site	Cocaine-dependent individuals were identified through nine publicly and privately funded inpatient and outpatient chemical dependency treatment centers in the St. Louis area during 2001–2006. Community-based participants (n=459) were matched to cocaine-dependent participants on age, ethnicity, gender, and zip code of residence.
Sample description	Cocaine-dependent individuals (n=459), Community (N=459). Mean age of the sample was 36 years old, 50% were Caucasians, 50% were African American, and 47% were male. No differences in age, race, gender, and zip code of residence were present between the cocaine dependent participants in treatment and community based participants because they were matched on these variables. Significant differences were still found in marital status, years of education, employment, disability status, and income between the two groups.
Key findings (relevant to the project)	Nearly half of cocaine-dependent participants in treatment had traded sex for drugs and=or money and over one-third had more than 10 sexual partners in 1 year with a risk concentrated among African Americans even after controlling for income and educational attainment. Cocaine-dependent participants in treatment were assessed against their community-matched counterpart stratified by each level of cocaine use. Significant differences between the two groups were founded for: cocaine-dependent men in treatment were at substantially greater risk for having traded sex for drugs and=or money at least once and having had 10 or more sexual partners within one year. Cocaine dependent women in treatment were at considerably greater risk for having traded sex for drugs and=or money at least once (46.3% versus 0%, p<0.001) and three or more times (40.4% versus 0%, p<0.001) in comparison to community-matched women who had never used cocaine. No significant differences in risky sexual behaviors (i.e., having traded sex for drugs and=or money once and=or 3 or more times and having 10 or more sexual partners in 1 year) or past STD diagnosis between cocaine dependent men in treatment and community-matched men who were experimental cocaine users. Women in treatment were at considerably greater risk for having traded sex for drugs and=or money at least once (51.9% versus 9.3%, p<0.001) and three or more times (45.3% versus 7.4%, p<0.001) in comparison to community matched men who were experimental cocaine users. Cocaine dependent men in treatment were at substantially greater risk for having traded sex for drugs and=or money when compared with their cocaine dependent community matched male counterparts (37.3% versus 17.0%, p ¼0.02). No significant differences were found for all other risky sexual behaviours (i.e., having traded sex for

	drugs and=or money 3 or more times and having 10 or more sexual partners in 1 year) or past STD diagnosis.
Implications of findings/ conclusions	Participants recruited from the community with a lifetime history of cocaine dependence had similar rates of high-risk sexual behaviours as the cocaine dependent subjects who were recruited from the treatment settings, with the exception of trading sex for drugs and=or money among cocaine-dependent men. This suggests that ‘‘community’’ factors contributed much less to the elevated rates of high-risk sexual behaviours than cocaine dependence. Our findings demonstrate a risk that is concentrated in cocaine-dependent individuals and especially among cocaine-dependent women, about half of cocaine dependent women in treatment had traded sex for drugs and=or money. Cocaine dependence is an important risk factor for high-risk sexual behaviours as well as a past STD diagnosis for both men and women. In addition, our findings demonstrated an even greater risk for high-risk sexual behaviours and STDs among cocaine dependent African Americans in treatment. The analysis indicated that the interplay of cocaine dependence with race and gender is an important risk factor for high-risk sexual behaviours as well as a past STD diagnosis, above and beyond socioeconomic factors including income and educational attainment.
Limitations of research	-Used zip codes to recruit community-matched participants (has received criticism in the scientific literature) -Not control for other socioeconomic differences like marital status and employment disability status. -The data analyzed in the current study were collected from an intended sample of cocaine dependent participants attending treatment centers within the St. Louis area and this population may differ from cocaine-dependent populations in other cities. -Use of selfreported sexual behavior that may either underestimate or inflate true risk behaviours. -Most participants were dependent on multiple substances (i.e., nicotine, marijuana, opiate, other drugs like stimulants, sedatives, hallucinogens, PCP, and=or intravenous drugs) that may be contributing to the prevalence of risky sexual behaviours. - Not control for exposure to traumatic experiences in any of the analyses because the majority of participants in this study (90%) had been exposed to at least one traumatic event.
Relevance to review aims	Not focused on recovery

Record	7
Author/s	D Cohan, A Lutnick, P Davidson, C Cloniger, A Herlyn, J Breyer C Cobaugh, DWilson, J Klausner
Title	Sex worker health: San Francisco style
Journal and page numbers	Sex Transm Infect ;82:418–422
Year of publication	2006
Country where research took place	San Francisco, US
Recruitment site	All individuals accessing care at St James Infirmary (SJI) began providing free medical services for male, female and transgender sex workers in the San Francisco Bay Area. Analysis limited to those current or past sex workers who sought care at SJI between September 1999 and November 2004. Did not report response rate.
Sample description	783 sex workers. Identifying as female (53.6%), male (23.9%), male to female transgender (16.1%), and other (6.5%). The mean age of participants was 33.1, and this differed significantly by gender. Race/ethnicity and educational level also differed significantly by gender. The most common substance used was tobacco (45.8%). Nearly 40% reported current illicit drug use.
Key findings (relevant to the project)	The sex workers covered a wide range of socioeconomic and racial/ethnic backgrounds and engaged in an extensive array of types of sex work. Nearly all of these individuals, including strippers and phone sex workers, reported being sexually active in their sex work. Sex workers commonly reported illicit drug use. The most common substance used in this population was tobacco. Violence, particularly at the hands of partners and family members, was markedly common in the lives of the sex workers studied. Street based and sex trade sex workers had the highest risk of sex work violence. The vast majority had never discussed their sex work history in the healthcare setting. STI prevalence was, overall, lower than has been seen in other studies of urban sex workers. There were factors found to be associated with increased risk of STI in this population, including African-American race, male gender, and sex work related violence. Risk of STI differed significantly by type of sex work. Risk of STI differed significantly by type of sex work. Interestingly, those working collectively with other sex workers were less likely to have an STI.
Implications of findings/ conclusions	STI prevention interventions should target African-American and male sex workers. Addressing violence in the workplace and encouraging sex workers to work collectively may be effective prevention strategies.
Limitations of research	limited information on specific sexual practices with different types of sexual partners and, thus, could not fully explore the complex set of factors that constitute STI risk, while we attempted to ascertain detailed sexual histories, many of the sex workers expressed difficulty in accurately quantifying the number of partners and sex acts, another limitation of this study was the use of a convenience sample of sex workers accessing health care at a sex work specific clinic. This population may not represent the larger population of female, male, and transgender sex workers in San Francisco. STI screening was offered to but not performed on all patients.
Relevance to review aims	Not focused on recovery

Independent sex work: street based, independent massage, independent in-call/out-call, sex trades, webcam based sex work, phone sex, and independent modelling. **Collective sex work** Included massage parlours, escort, brothels, stripping, bondage- dominatrix-sado-masochism (BDSM), and pornography.

Record	8
Author/s	Michael M. Copenhaver, Blair T. Johnson, I-Ching Lee, Jennifer J. Harman, Michael P. Carey, SHARP Research Team
Title	Behavioral HIV risk reduction among people who inject drugs: Meta-analytic evidence of efficacy
Journal and page numbers	Journal of Substance Abuse Treatment, 31, 163– 171
Year of publication	2006
Country where research took place	USA
Recruitment site	
Sample description	
Key findings (relevant to the project)	
Implications of findings/ conclusions	
Limitations of research	
Relevance to review aims	No. Meta-analysis of randomized controlled trials (RCTs) to evaluate behavioral HIV risk reduction interventions targeting people who inject drugs, not for sex workers and not treatment needs.

Record	8
Author/s	Linda Cusick
Title	Widening the harm reduction agenda: From drug use to sex work
Journal and page numbers	International Journal of Drug Policy, 17, 3–11
Year of publication	2006
Country where research took place	Many countries included
Recruitment site	Not recruitment
Sample description	No sample
Key findings (relevant to the project)	Addiction is frequently associated with sex work and generally discussed in terms of negative consequences for the sex worker's health, safety when working or risk of becoming trapped by the mutually reinforcing aspects of certain behaviours or substances. Some harms like STIs were introduced by sex, other harms like drug dependency were reinforced by availability of money but no additional harms were introduced by the actions of exchanging sex and money. All of the remaining harms identified in the literature as arising from sex work were limited to and dependent on the specific conditions of some sex markets. Predation and victimisation such as abusive pimping were found in studies of sex markets where sex workers were fearful of authority, isolated and personally vulnerable. Children, drug users and migrant sex workers who cannot access indoor sex markets, who do not have the resources or confidence to work as entrepreneurs and who do not know enough about their options are the key targets for sex market predators. Violence and child abuse were found in many sectors of sex work but the youngest, the most serious assaults and the greatest number of murders were concentrated in sex markets. Stigma and negative effects on self-esteem or mental health are said to arise from all types of sex work. Viruses do not respect organisational or social distinctions and thus STIs are found amongst sex workers in almost all sex markets. Where genital contact is the norm, condoms are widely used and STIs effectively prevented. Even here, it appears that opportunities to control the harms that might be introduced by sex work are dependent on the conditions in which sex workers operate Sex workers who appear to be drug users are most often denied work in indoor and co-operative sex work establishments. The open, street-based and low status sex markets thus become the only ones accessible to drug using sex workers. Public nuisance is introduced by sex markets that are obvious rather

	than discrete. These are often busy places also populated by the public who are having a night out, sex workers' clients, drug dealers, drug purchasers and vigilantes with a mission to halt sex markets- The pre-existing vulnerabilities found amongst sex workers are not unique to this group and neither is it likely that these vulnerabilities first come to light when the vulnerable person becomes a sex worker. The success of an abolitionist/prohibitionist programme might be measured by its impact on the number of clients, sex workers or sex work premises operating in the area/sector targeted. Since these impacts are notoriously difficult to demonstrate amongst hidden populations, evidence often takes the form of case studies in which individuals 'are saved' from sex work. Like drug related harms, the harms that are introduced by sex work are currently affecting many vulnerable people and there is a pressing need to reduce them.
Implications of findings/ conclusions	The tasks for harm reductionists in this field may, therefore, be stated as: to reduce existing vulnerability amongst sex work entrants; and to ensure that sex work does not introduce further vulnerability. Some harm reduction programmes already exist to address the structural factors underlying sex work careers that begin in the context of poor opportunities to pursue alternatives. Education, training and skills programmes are increasingly considered as appropriate interventions Similarly, for global problems like poverty, political instability, war and gender inequality, sex work may be an expression of these problems but the solutions do not rest with sex work. The remaining harms identified in the literature are as follows: predation and victimisation; violence and child abuse; trafficking and slavery; stigma; low self-esteem; mental illness; and the effects of sanctions and penalties. Parallel with the conclusion that these harms arise from the conditions in which sex is bought and sold, they are concentrated where sex work is illicit and have been reduced where it has been decriminalised or in some cases where it has been legalised or licensed. To conclude, commercial sex is a suitable area for development of the harm reduction agenda. The current focus on drug related harm neglects opportunities to reduce these wider harms. To disentangle sex work from criminal control it will be necessary to decriminalise sex work and, some also argue, for sex workers to campaign for their human and employment rights. The refined conclusion is, therefore, that the harms and benefits of sex work depend on the conditions in which sex is bought and sold. In summary, this analysis indicates that the ways in which sex work is organised determines whether it introduces harm, increases the vulnerability of sex workers or allows sex workers to benefit from sex work.
Limitations of research	Not reported
Relevance to review aims	Potentially

Record	11
Author/s	Kathleen N. Deering, Thomas Kerr, Mark W. Tyndall, Julio S.G. Montaner, Kate Gibson, Laurel Irons, Kate Shannon
Title	A peer-led mobile outreach program and increased utilization of detoxification and residential drug treatment among female sex workers who use drugs in a Canadian setting.
Journal and page numbers	Drug and Alcohol Dependence 113 46–54
Year of publication	2011
Country where research took place	Vancouver, Canadà
Recruitment site	242 female sex workers (FSW) were recruited. The majority of these women lived or worked in Vancouver's downtown eastside core, referred to here as the inner city epicentre; this area is notorious for a highly concentrated area of individuals with low-cost housing, poverty, health inequities, substance use and mental illness problems, as well as extensive prevention and harm reduction programming. Through time-spacing sampling, social mapping and targeted outreach to sex work strolls. Time-space sampling was used to systematically sample women (inclusive of transgender women) at staggered times and locations based on street-based solicitation spaces identified through mapping. Prospective cohort study (response rate of 93%).
Sample description	A sample of 242 FSWs who use drugs were eligible for this analysis. The median age was 36 years (interquartile range: 26–41 years). In total, 50.8% selfidentified as being Caucasian, 47% as being of Aboriginal. ancestry and 6.7% were of other ethnic heritage. 42% inject Cocaine , 55% inject heroin, 14% inject or smoke methamphetamine, 37% drink alcohol. 10% living like homeless, 19% Reside in IDU epicentro.
Design and methods	The objectives of this study were to examine the determinants of using a peer-led mobile outreach program (the Mobile Access Project [MAP]) among a sample of street-based female sex workers (FSWs) who use drugs in an urban Canadian setting and evaluate the relationship between program exposure and utilizing addiction treatment services. The Mobile Access Project (MAP) van.
Key findings (relevant to the project)	Over 18 months, 42.2% (202) reports of peer-led mobile outreach program use were made. High risk women, including those servicing a higher weekly client volume and those soliciting clients in deserted, isolated settings (AOR: 1.7, 95%CIs: 1.1–2.7) were more likely to use the program. In total, 9.4% (45) reports of using inpatient addiction treatment services were made (7.5%

	detoxification; 4.0% residential drug treatment), and 33.6% (161) using outpatient treatment (28.8% methadone; 9.6% alcohol/drug counsellor). Women who used the peer-led mobile outreach were more likely to use inpatient addiction treatment, even after adjusting for drug use, environmental–structural factors, and outpatient drug treatment.
Implications of findings/ conclusions	As such, our research extends earlier evidence indicating that mobile outreach programs are a critical 'safer environment intervention', modifying the physical and social environments by reaching sex workers where and when they work and therefore reducing barriers to accessing harm reduction supplies and health and social services, including addiction treatment. Our results suggest that mobile outreach programs have the opportunity to play an important role in HIV/STI prevention through distribution of resources to some of the most vulnerable womenin sex work. Among sex workers who use drugs, higher frequency of sexual exchange has been shown to be a barrier to accessing drug treatment, likely due to increased sex work to support higher levels of drug use. At the same time, younger FSWs were significantly less likely than older women to access the MAP van, suggesting that continued barriers to sex work services exist for this population; in other studies, multiple barriers to accessing health services by youth have been identified. Our results may indicate a need to tailor this mobile access programs specifically toward youth; however, it is also possible that younger individuals in the study population may be accessing other youth-targeted outreach or addiction treatment programs. In summary, our results indicate that using a peer-based mobile outreach program may facilitate utilization of inpatient addiction treatment for high-risk, vulnerable FSWs.
Limitations of research	The study population included only women in street-level sex work; since sex work is conducted across many other types of venues, the results may not be generalizable. The sample was not randomly generated and may not be representative of street-based FSWs in other settings Although the sample size was relatively small, we targeted a difficult-to access, hidden and marginalized population with high health care and drug treatment needs The study design is observational in nature and thus cannot determine causal relationships

Record	12
Author/s	K.N. Deering, J. Shoveller, M.W. Tyndall, J.S. Montaner, K. Shannona
Title	The street cost of drugs and drug use patterns: relationships with sex work income in an urban Canadian setting.
Journal and page numbers	Drug and Alcohol Dependence 118, 430– 436
Year of publication	2011
Country where research took place	Vancouver, Canada
Recruitment site	Between April, 2006 and May, 2008, 255 women who were engaged in street-based sex work (inclusive of transgendered women) were recruited and consented to participate in a prospective cohort study. Response rate of 93%. These street-based solicitation spaces were identified through a participatory mapping exercise conducted by current/former sex workers.
Sample description	The median age of the sample at first visit was 37 years ([IQR]: 30–43), with 46.5% identifying as Caucasian, 48.1% as Aboriginal and 5.4% as another visible minority.
Key findings (relevant to the project)	We found that in a typical week, women reported earning a median of $300 from sex work income, spent a median of $400 on drugs and had a median of 6 clients. Overall, 95% of women reported having some other income (including that from financial assistance, other legal employment and illegal activities), earning a weekly median of $700 (mean = $780) from this income. The amount of money spent on drugs, heroin injection, numbers of clients and being younger (<25 versus 25+) were independently significantly associated with higher sex work income in multivariate analysis.
Implications of findings/ conclusions	This study demonstrate an independent, positive dose-response relationship between the amount of money spent on drugs by women in a street based sex market and the amount of money they earn through sex work. The cost to FSWs associated with street heroin injection was also significantly and independently related to increased sex work income. Women in sex work who use heroin may be more economically vulnerable and dependent on sex work for income than women who use other types of drugs. This association remained significant even after adjusting for the amount of money spent on drugs, women's dependency on heroin combined with its higher cost may influence women to engage in higher-risk behaviour for which they can earn more money. This supports previous research indicating that the shift in Vancouver to widely available stimulant crack cocaine, a less expensive street drug than injection heroin, may downwardly influence the amount that women can charge and clients will pay for services. Opiate-substitution therapies can reduce in average amount of money spent on drugs, indicating that this could be a important intervention to reduce harm to vulnerable women who engage in sex work to sustain heroin use. Improving access and utilization of addictions treatment for women in sex work could also reduce women's dependence on sex work earnings to

	support drug use. This approach should be coupled with other low-threshold training, employment and/or improved economic security, including evaluation of programs to support transitioning out of sex work for survival. Increased economic control for sex workers may be a critical HIV intervention strategy in promoting condom negotiation with clients, or reducing the likelihood that women will engage in other riskier behaviour in exchange for higher earnings per sex act. Evidence suggests removal of criminal sanctions would promote sex work occupational safety by reducing violence, increasing access to health and social support services and increasing women's safety and ability to negotiate condom use with clients. Results also confirm that youth can generate a higher income from sex work compared with older sex workers, may reflect increased bargaining power (and amount charged per transaction) due to higher demand for young sex workers among male clients.
Limitations of research	-The study population included only women in street-level sex work; since sex work is conducted across many other types of venues, the results may not be generalizable. -The sample was not randomly generated and may not be representative of street-based FSWs in other settings. -Self-reported behaviour may be subject to social desirability bias or higher non response rates.
Relevant to review aims	Yes

Record	13
Author/s	Kathleen Nicole Deering, Kate Shannon, Hayley Sinclair, Devi Parsad, Erin Gilbert, Mark W. Tyndall
Title	Piloting a Peer-Driven Intervention (PDI) Model to Increase Access and Adherence to Antiretroviral Therapy and HIV Care among Street-Entrenched HIV-Positive Women in Vancouver
Journal and page numbers	AIDS PATIENT CARE and STDs, Volume 23, Number 8
Year of publication	2009
Country where research took place	Vancouver, Canada
Recruitment site	Participants were recruited into the PDI through referral by an HIV specialist, family care physician, or other health provider, friend, or by self-referral. Analyses were based on participants with a minimum of 6 months enrollment in PDI. Response rate not reported.
Design and methods	PDI participation included weekly peer support meetings, a health advocate (buddy) system, peer outreach service, and onsite nursing care. Adherence was measured directly with pharmacy records (PR) and indirectly with self report and viral load (VL) outcomes.
Sample description	20 HIV-positive women. Mean age of 41.7 years (range, 21 to 62 years). The most common Self-reported health problems at baseline were; hepatitis C (75% reporting), depression (50%). The majority of women reported living in a single room occupancy hotel (55%), with 20% reporting living in an apartment or house, 10% reporting having no fixed address. Fifty-five percent of the women reported that their partner=family were their main sources of social support, 20% reporting their friends, 10% reporting HIV organizations, and 10% reporting a social worker. 40% of participants reported they currently injected drugs, including stimulant drugs (cocaine, crack cocaine, crystal methamphetamine) and=or opiates. Eighty-five percent currently smoked drugs (including cocaine, heroin, or crystal meth); 80% currently smoked crack cocaine. 25% currently injected heroin, but non daily.
Key findings (relevant to the project)	Participants attended an average of 50 (21–70) PDI meetings. PR: The mean weekly adherence per PDI-week and the mean fraction of weeks with 80% and 100% adherence was higher in Women who injected or smoked drugs an average of at least 1 day per week, who reported smoking crack approximately daily and who reported moving at least once during the time they were enrolled in the PDI.Overall selfreported (SR) adherence was high (92%) and most women (11) reported increased adherence from the first to the last 13 PDI meetings attended (average increase 18%). The number of viral load (VL) tests _50 copies=mL increased by 40% from the pre-PDI period (1 year before enrollment), to the PDI period (duration enrolled). PR adherence and improvements in VL outcomes were higher among participants with greater housing instability and frequency of

	injecting=smoking drugs.
Implications of findings/ conclusions	Despite a very difficult environment to provide HIV care, there is evidence to suggest that the PDI may have had a positive impact on adherence outcomes. Although this would not predict long-term treatment success, the PDI approach to HIV treatment support is a promising program for women who might otherwise be excluded from treatment altogether. The PDI may have been more beneficial for higher-risk women, since pharmacy record adherence and improvements in viral load outcomes were higher among participants with higher risk behavior including increased drug use and housing instability.
Limitations of research	- Small sample size - Did not have a comparison group for the PDI attendees - Self-report adherence would likely be the optimal way to measure adherence in this population rather than from pharmacies. - Women could receive medication from any pharmacy in this study; however, each pharmacy had different quality of data record-keeping and levels of commitment to participating in the PDI which resulted in a fair amount of missing or unconfirmed data.
Relevance to review aims	Potentially

Record	14
Author/s	Nabila El-Bassel, Wendee M Wechsberg, Stacey A. Shaw
Title	Dual HIV risk and vulnerabilities among women who use or inject drugs: no single prevention strategy is the answer
Journal and page numbers	Current Opinion HIV AIDS, 7:326–331
Year of publication	2012
Country where research took place	This review has been performed in many countries: Australia, United States, Russia, South Africa,
Recruitment site	n/a
Sample description	Profile: -Studies have described dual HIV risks (drugs and sex) among women who use or inject drugs and among FSWs, including sharing contaminated needles and syringes , using crack cocaine, and using methamphetamines. -Risky sex behaviors include unprotected vaginal and anal sex with regular or casual partners and sex-trading clients, sexual concurrency, and experiencing sexual abuse or rape by intimate partners and sex-trading clients -The association between the practice of 'flashblood' (whereby an IDU injects herself with blood extracted from another IDU who recently injected) and HIV status among 169 female IDUs from Tanzania, -Flashblood sharers were more likely to inject heroin and use contaminated rinse water than women who did not share. - In a study conducted with 198 HIV seropositive women, mostly crack cocaine users (80%) from three US cities, having a primary and casual sex partner more than doubled the risk of having an STI -In another study, which compared South African adolescent female methamphetamine users (n=261) with nonusers (n=188), found that Young female methamphetamine users were six times more likely not to use condoms compared with young women who used other drugs and were more likely to be sexually abused than nonmethamphetamine users. - Female IDUs in St Petersburg, Russia, experienced multiple HIV risks from sharing needles, partner's drug use, and sexual risk with their main partners and sex trading partners
Design and methods	Review This article examines studies published within the past 18 months (2010–2011) that were conducted with women who use or inject drugs including FSWs. -Research areas: • Drug and sexual risk behaviours of women who use or inject drugs multilevel drivers (individual, social, and structural) of HIV and STI risk

	• HIV prevention strategies • Implications for multilevel HIV prevention strategies needed to contain the HIV epidemic among women who use or inject drugs.
Key findings (relevant to the project)	Multilevel drivers including individual, social, and structural level factors influence vulnerability to HIV and STI risk among women who use or inject drugs. -The unique contexts and multilevel drivers that influence women who use or inject drugs, including sex workers, must be addressed in HIV prevention efforts among this population. -Additional research is needed on dyadic, social, and structural level HIV prevention strategies and biomedical prevention among women who use or inject drugs.
Implications of findings/ conclusions	-To understand the local epidemic is the starting point for effective HIV prevention for women who use drugs. Addressing dual risks and providing combination, multilevel HIV prevention strategies are crucial to stop the epidemic -A progress in behavioral HIV prevention strategies targeting the individual, with a strong emphasis on women's unique needs, addressing IPV, relationship contexts, mental health, and improving skills to assist access to HIV care and treatment was reported. -social prevention level approaches: It was described limited evidence-based HIV prevention strategies targeting the community, social network, family, and service settings. - Recent research describes some progress in couple-based HIV prevention for female drug users, but this modality also remains scarce. - Structural level prevention addressing poverty, laws, and policies affecting the lives of women who use drugs also remains limited. -It is highlighted the need for public policies to fight discrimination and sex-based violence; to stop police mistreatment, arrest, and registration of female drug users; and to increase the access to HIV treatment and care. - More research is need in drug abuse treatment and HIV services more available and friendlier to women by addressing sex-specific needs such as antenatal care, childcare, and prevention of IPV and trauma; and by protecting the human rights of women who use drugs. -It is desirable a combination of behavioral and biomedical prevention strategies (e.g., SEPs, MTPs, ART, PreP, and microbicides) to optimize the HIV prevention impact. -No single prevention strategies are sufficient to reduce HIV risk and a multilevel prevention approach combining individual, social, structural, and biomedical prevention may be most efficacious. -Implementation and scale-up of evidence-based HIV

	prevention for women who use drugs must consider the unique social contexts and multilevel drivers of risk to ensure successful outcomes and sustainability of HIV-risk reduction efforts. - Women vulnerable to HIV often do not have the political capital to ensure multitier changes to enhance their economic power. -There is greater equality in global regions where women are at most risk for HIV, targeted and comprehensive combination prevention programs will need to address these disparities
Limitations of research	Not reported
Relevance to review aims	Focus on HIV risk behaviours among female sex workers

Record	15
Author/s	Francisco José Eiroá-Orosa, Uwe Verthein, Silke Kuhn, Christina Lindemann, Anne Karow, Christian Haasen, Jens Reimer
Title	Implication of Gender Differences in Heroin-Assisted Treatment: Results from the German Randomized Controlled Trial
Journal and page numbers	The American Journal on Addictions, 19: 312–318
Year of publication	2010
Country where research took place	Hamburg, Germany
Recruitment site	The German trial was designed as a multicenter randomized controlled trial in seven cities in order to examine whether medical prescription of pharmacologically clean heroin (diamorphine) in a structured and controlled treatment setting for specific groups of opioid-dependent patients leads to an improvement of health and reduction of illicit drug use. Two target groups were defined: methadone treatment failures, consisting of opioid-dependent patients who are currently enrolled in MMT, but do not profit sufficiently from this treatment form (continued intravenous illicit drug use) and opioid-dependent patients not currently in treatment (patients who have dropped out of addiction services but are in need of treatment).
Design and methods	multicenter randomized controlled trial
Sample description	After baseline examinations, inclusion and exclusion criteria left an intention-to-treat (ITT) sample of 1,015 patients (811 males and 204 females). This sample was randomized according to type of medication (heroin or methadone) and type of psychosocial care received (psychoeducation plus individual counseling, PSE; or case management plus motivational interviewing, CM). Baseline characteristics Female participants were younger and more often had children than males. Women had less years of heroin use, but had initiated benzodiazepine use earlier. Females had a higher severity of addiction in the ASI domains of physical health, drug use, and mental status. Although not significant, a tendency of higher severity was found in the domain of family relationships. Data on physical and mental health confirm ASI data: Women had higher OTI and GSI scores and a greater proportion had suicide attempts. They were more often HIV positive; however, the difference did not reach significance. A greater proportion of women had maintenance treatment experience. No significant differences were found between treatment groups.
Key findings (relevant to the project)	-Women entering maintenance treatment have a much more complicated clinical picture. -Women had a higher severity of addiction on four out of the nine ASI

	composite scores. This is associated with a higher rate of prostitution, this being one of their important sources of income to finance daily living expenses and illicit drug use. -A higher percentage of women compared to men have children, which for some is an additional responsibility, which may further complicate the clinical Picture. -The sample of women does not show better primary outcome measures for improvement of health and reduction of illicit drug use in the heroin compared to the methadone group. *This may in part be the case due to the much larger sample size for men, the study therefore not being powered to detect gender differences. However, the difference in sample size between men and women reflects the overall gender difference with respect to prevalence rates for opioid dependence, so that it can be considered a representative sample. -The greater extent of mental distress for women at baseline, and a higher rate of previous suicide attempts, may also hamper improvement, as both HAT and MMT are not treatment options that will have a primary effect on mental health disorders. -Female patients: Treatment outcome is mediated by a factor such as the risk-associated behavior of prostitution, implying that outcome for women needs to be focused on other aspects than for men. -Prostitution decreased in the HAT group to a greater extent than in the MMT group and had a significant influence on the reduction of illicit drug use. -Women in treatment are unable to reduce their problems related to family and social relationships, as seen in the respective ASI composite scores, which may be tied to their greater responsibilities related to children -These aspects are insufficiently mirrored in the primary outcome measures.
Implications of findings/ conclusions	-The positive results of controlled studies comparing HAT and MMT for severely opioid-dependent patients has lead to this treatment option having been added to the general health policy in Switzerland, the Netherlands, Great Britain, and German. - In the evaluation of HAT, a focus should be placed on assessing the special needs of women in treatment, mainly the reduction of high-risk behavior such as prostitution and additional support in coping with family responsibilities, in order to make sure that their benefit from switching from MMT to HAT can become more obvious. However, addressing these special needs of women in maintenance treatment will also lead to better treatment outcome

	in MMT, so that the indication for switching a woman from MMT to HAT may need to be screened more carefully. -HAT shows better outcome also in women, even if not in the primary outcome measures, but certainly in several secondary measures, so that it should not be questioned as an alternative treatment option even among women.
Limitations of research	Prostitution and Women in treatment are insufficiently mirrored in the primary outcome measures.
Relevance to review aims	Yes

Record	16
Author/s	Shira M. Goldenberg, Gudelia Rangel, Alicia Vera, Thomas L. Patterson, Daniela Abramovitz, Jay G. Silverman, Anita Raj, Steffanie A. Strathdee
Title	Exploring the Impact of Underage Sex Work Among Female Sex Workers in Two Mexico–US Border Cities
Journal and page numbers	AIDS Behav, 16:969–981
Year of publication	2012
Country where research took place	Tijuana and Ciudad Juarez Mexico.
Recruitment site	624 FSWs in Tijuana (N = 308) and Cd. Juarez (N = 316) were recruited between October 2008–July 2010. Local outreach workers unobtrusively approached women at bars, street corners, and motels to assess study interest and eligibility. This analysis was restricted to baseline data. Multivariate models were restricted to 534 women for whom complete data were available for variables of interest.
Design and methods	Cross-sectional data were collected during baseline interviews and laboratory testing for an intervention study that aimed to reduce injection and sexual risks associated with HIV/STI acquisition among FSWs who inject drugs Eligible women were female, C 18 years old, lived in Tijuana or Cd. Juarez, spoke Spanish, or English, did not plan to permanently move out of the city in the following 18 months, and reported selling/ trading sex, injecting drugs, unprotected sex with clients, and syringe sharing in the past month. Trained outreach workers administered computer-assisted programmed interview (CAPI) surveys in private offices. Surveys included questions on socio-demographics, sex work, and drug use history, and risk environment factors.
Analysis	To control for multiple testing, the raw P-values associated with outcomes within each area of interest (e.g., socio-demographics; sex work and substance use history) were adjusted for false discovery rate (FDR) by using the Hochberg and Benjamini method. While both raw and FDR Adjusted P-values are listed in Tables 1 and 2, the corresponding statistical inferences are based on FDR Adjusted P-values (PFDR - Adj).
Sample description	Overall, 41% (n = 253) of women entered sex work as minors. They were more likely than those who began as adults to be younger (median: 30.0 vs. 35.0 years, Pfdr - Adj =<0.001, Z = 5.62), married, have fewer years of education, and be non-migrants. The median age at which respondents who began sex work as minors began to sell/trade sex was 15 years, compared to 22 years among those who entered as adults. They were more likely than adult initiators to report inhalants as the first drug they used, and began drinking alcohol (median: 13.9 vs. 16.4 years, Pfdr - Adj =<0.001, Z = 7.42) and injecting drugs (median: 17.0 vs. 22.0 years, Pfdr - Adj =<0.001, Z = 11.47) at a younger age than their adult counterparts. Women who began sex work as minors were also significantly more likely to report that their first

	experiences using any drugs, injecting drugs, or drinking alcohol occurred after beginning sex work. Women who began sex work as adolescents were less likely than their adult counterparts to report economic factors such as children's needs or daily expenses as reasons for beginning sex work. Regarding social influences on HIV risk, nonconsensual injection was more frequently cited as a reason for beginning to inject drugs by women who entered sex work as minors; adult initiators were more likely to cite depression or stress. Women who began sex work as minors were also more likely to report early gender-based violence than their adult counterparts; however, they were less likely to report that such violence occurred before beginning sex work. Among victims of prior abuse, these women were younger when they were first physically abused or raped than adult initiators.
Key findings (relevant to the project)	Women who began sex work as minors were more likely to report economic influences on risk, such as earning higher incomes through sex work and having a greater number of clients (mean: 53.86 vs. 46.17, PFDR - Adj = 0.022, Z = 2.30) in the past month. In terms of social influences, women who began sex work as youth were more likely to report fewer condom negotiation attempts with steady partners, a greater number of unprotected sex acts, receptive needle sharing, and injecting with more people in the past month. women who began sex work as minors were also more likely to report risks related to the policy environment in the past 6 months. Prevalence of HIV and any STI/HIV were 5.2 and 60.7% among women who began sex work as minors, compared to 6.1 and 63.1% among older initiators; these were not significantly different. Variables that were independently associated with increased odds of underage sex work included reporting inhalants as the first drug used, nonconsensual injection as the reason they began injecting drugs, number of lifetime drug treatment attempts, and receptive needle sharing in the past month.
Implications of findings/ conclusions	We argue that females who enter sex work as adolescents are a vulnerable population who experience multiple, accumulating risks as youth and adults, including violence, forced and unsafe substance use, and unprotected sex. Since vulnerable populations often experience fewer opportunities than groups with more resources to derive benefits from population-based interventions, targeted interventions for vulnerable youth and younger FSWs are needed. Due to their inter-related nature and tendency to cluster, substance use, violence, and HIV/AIDS risk often manifest as syndemics. Since wider social and structural conditions (e.g., homelessness; gender-based violence; poverty) typically generate syndemics of HIV/STIs, substance use, and violence interventions with vulnerable populations must address structural as well as individual-level factors.
Limitations of research	- Research with youth sex workers is often limited by their vulnerability, including ethical and reporting considerations associated with research among minors. - The absence of programs serving adolescent FSWs led us to conclude that their recruitment was unethical. - We retrospectively analyzed FSWs' experiences, which represented the safest way to study underage sex work. - Due to its cross sectional nature, our data cannot indicate causality. - Experiences not included in our model, such as childhood abuse, may mediate the relationship between later experiences and underage sex work.

	- Future analyses that incorporate mediation models could provide an important opportunity to ascertain the nature of the relationship between early and later experiences and HIV infection among underage FSWs. - It is possible that our sample size was not large enough to capture corresponding differences in HIV/STI prevalence, suggesting the need for large future studies among youth populations engaged in sex work. - Our data also may be affected by social desirability bias, which would have underestimated risks.
Relevance to review aims	Not focused on recovery.

Record	17
Author/s	Leif Gronbladh, Lennart S. Ohlund
Title	Adherence and social antecedents in relation to outcome in Methadone Maintenance Treatment (MMT)
Journal and page numbers	Heroin addiction and related clinical problems 12 (2): 9-18
Year of publication	2010
Country where research took place	Uppsala, Sweden
Recruitment site	Participants were admitted to a National methadone maintenance program at the University Hospital in Uppsala, Sweden. Subjects were admitted during 1966-1990 with all outcome data prospectively collected. There was a stand-still in intake of new patients during 1979-1984 due to political struggle around methadone treatment in Sweden.
Design and methods	The aim of this paper is to investigate which of the background variables, collected at the admission procedure, that can be used to tell which type of patient will adhere to the treatment regime and succeed or who will fail and who either need special considerations or ought not to be accepted for a methadone treatment (MMT). Secondary data analysis of routine data
Sample description	345 opiate addicts (102 female and 243 male addicts).
Key findings (relevant to the project)	
Implications of findings/ conclusion	
Limitations of research	Does not discuss sex workers or their needs, and no outcomes are presented in relation to prostitution.
Relevance to review aims	No

Record	18
Author/s	Josephine Hocking
Title	Prostitutes and the charities working to help them leave the streets
Journal and page numbers	Community Care, 5th October issue, pages 28 & 29
Year of publication	2006
Country where research took place	England, UK (not research)
Recruitment site	Discussion paper
Sample description	n/a
Key findings (relevant to the project)	-Gaps in provision identified by the Poppy Project report include: dedicated exiting services, outreach, accommodation, single sex rehabilitation, counselling, mental health services, education programmes, peer support and community safety strategies. - Louise Matts is co-ordinator at the Streetlife project in Cardiff. With volunteers she goes out on the streets at night to meet the city's sex workers and helps them leave prostitution by helping them get support.
Implications of findings/ conclusions	Highlights needs of sex workers and gaps in service provision.
Limitations of research	It is an article about the experience of Tracy Kennett who describes life on the streets. Josephine Hocking looks at the work of small charities in steering people away from working in prostitution and asks whether government initiatives north and south of the border will help. Not research, limited information presented.
Relevance to review aims	Potentially

Record	19
Author/s	Patricia A. Janssen. Kate Gibson, Raven Bowen, Patricia M. Spittal, Karen L. Petersen
Title	Peer Support using a Mobile Access Van Promotes Safety and Harm Reduction Strategies among Sex Trade Workers in Vancouver's Downtown Eastside
Journal and page numbers	Journal of Urban Health: Bulletin of the New York Academy of Medicine, Vol. 86, No. 5
Year of publication	2009
Country where research took place	Vancouver, Canada
Recruitment site	Vancouver's Downtown Eastside (DTES) is characterized by abject poverty, high crime rates, homelessness, prostitution, mental illness, and rampant alcohol and drug use. Women working in the DTES sex trade are subject to extreme violence and abuse. We conducted surveys with 100 women sex workers who accessed Mobile Access Project (MAP) services in January 2006. To conduct the survey, two research assistants followed the van in a car and at each stop stood about 20 ft in front of the van. They received a $5.00 food coupon. In addition, we reviewed daily logs from the van to ascertain the number of clients served, clean needles and condoms distributed, and used needles turned in. They assessed the impact of MAP through review of data from a concurrent cohort study of injection drug users and a survey of 97 women at a drop-in center in the Downtown Eastside.
Design and methods	The MAP van commenced operations on March 15, 2004. Staffed by a driver and two peer support workers, the van circulates through the DTES and surrounding areas every night from 10:30 p.m. to 5:30 a.m., stopping roughly every six blocks and spending about 15 min per stop. The route follows many of the "strolls" frequented by sex trade workers. The annual budget for operation of the van, including wages and training, is $294,000. To our knowledge, the MAP van is the first mobile outreach service staffed by peers to serve women in the sex trade. We evaluated the impact of MAP on safety and adoption of harm-reducing behaviors among sex workers. We undertook a survey among sex workers using MAP services in January 2006. Survey items were generated by members of the research team. Agreement on face validity was achieved by consensus. We pretested our survey instrument on 30 sex workers and then simplified the vocabulary and sentence structure. The survey was divided into two parts. In the first survey, we asked nine questions, designed to determine how respondents learned about the van, when and why they used it and their sociodemographic status. On the second part of the survey, conducted 3 weeks later, we asked 17 questions, focused on support and services received at the van and perceived impact of the program on safety.
Sample description	The age of participants ranged from 16 to 53 and 84% were between the ages of 22 and 45. The largest self-identified ethnic group was First Nations women (43%) followed by women of European descent. MAP clients described a frightening array of violence perpetrated against them, such as being brutally beaten, punched in the face, strangled, and dragged down the street by cars.

Key findings (relevant to the project)	**Access to Map**: The majority of women surveyed used van services once (44.8%) or twice (20.9%) each night. The remainder of the women reported accessing the van twice weekly (17.9%), once weekly (11.9%), or less frequently (3.0%). Log books indicated that MAP was rapidly adopted. The average number of monthly contacts increased from 963 in 2004 to 1,269 in 2005 and 1,496 in 2006. **Violence,** over 90% of MAP clients reported that the van made them feel safer on the street. Sixteen percent of surveyed MAP clients recalled a specific incident in which the van's presence protected them from a physical assault and 10% recalled an incident when its presence had prevented a sexual assault. The mean number of condom packs distributed per month doubled in the first year, from 531 in 2004 to 1,074 in 2005 and increased to 1,432 in 2006. The number of clean needles dispensed per month almost tripled during the MAP's first 3 years of operations from 1,240 in 2004 to 3,241 in 2006. 107 female sex workers in the VIDUS cohort responded to a question related to their use of the MAP van and we compared women who used MAP with those who did not. A higher proportion of MAP users were injecting cocaine one or more times daily (31% vs. 19%), but rates of daily heroin injection at about 50% were similar. A higher proportion of MAP users were smoking crack (81% vs. 72%). Rates of borrowing used needles were similar (10%) but none of the MAP users, compared to 10.5% of the non-MAP users, had lent used needles. Differences were not statistically significant.
Implications of findings/ conclusions	MAP prevent both physical and sexual assault. The large and increasing number of needles exchanged suggests that MAP could play a decisive role in prevention of HIV–AIDS and hepatitis C among sex workers. A key reason for the success of the needle program may be that women can access the van without leaving the corner they are working on for more than a few minutes. Another reason may be the social support provided by peers who staff the MAP van. In conclusion, MAP holds much promise as a relatively low-cost method of meeting the immediate needs of women engaged in street-level sex work, including shelter from imminent danger, first aid, condoms and clean needles, information about predators, and access to health and other community services. Our study demonstrates the utility of using peer support for this especially vulnerable group of women. Our findings should encourage other large urban centers to consider the implementation of a mobile access service to monitor and enhance the safety of women in the sex trade.
Limitations of research	The study is limited by our inability to assume that women who use MAP are representative of all DTES sex workers and because 50–90% of women at each survey location participated in the survey. We used a "sample–resample" approach to estimate the proportion of women working on the street that answered our survey.15 Since 30 women out of our sample of 90 answered both questions, we believe that our participants represented about one third of the population of sex workers on the MAP route.
Relevance to review aims	Yes although focus is not on recovery.

Record	20
Author/s	N Jeal, C Salisbury
Title	Health needs and service use of parlour-based prostitutes compared with street-based prostitutes: a cross-sectional survey.
Journal and page numbers	International Journal of Obstetrics and Gynaecology - BJOG , vol. 114, no. 7, pp. 875-881
Year of publication	2007
Country where research took place	Bristol, UK
Recruitment site	Recruitment was by visiting parlours with drug and health outreach workers. The population of women working in parlours is very mobile but was estimated at about 140 by using the number of women rostered per week in the parlours visited. Thirteen of the 15 massage parlours in Bristol were visited repeatedly until the requisite number of parlour sex workers had been recruited. Participating women were paid £20 for childcare and travelling expenses. Of 81 parlour sex workers approached, 71 agreed to be interviewed. One of those refusing was of oriental appearance and by poor English knowledge.
Design and methods	Cross sectional survey
Sample description	71 female sex workers, whose current main city of work was Bristol and who worked in massage parlours. Seventy-one street sex workers had been interviewed over a 4-week period to avoid population change over time. Therefore, the same number of women working in parlours was interviewed. The average age was 27.2 years (range19–43) for parlour sex workers and 27.9 years (range 17–43) for street sex workers. The majority of both groups were white European (59/71 [83%]) versus 62/71 [87%]) or one of the black ethnic groups (8/71 [11%] versus 7/71 [10%]). Parlour sex workers disclosed originating from a variety of countries including Lithuania, Ukraine, Albania, Russia, Poland and Kenya, but most were from the UK. None of the street sex workers was from outside the UK. Parlour sex workers appeared to have a more stable childhood, more stable current home environment, fewer chronic health problems than street sex workers.
Key findings (relevant to the project)	In comparison with street sex workers, parlour sex workers were less likely to report chronic (43/71 versus 71/71; P < 0.001) and acute (10/71 versus 35/71; P < 0.001) illnesses but more likely to be registered with a GP (67/71 versus 59/71; P = 0.06). They were more likely than street sex workers to have been screened for sexually transmitted infections in the previous year (49/71 versus 33/71; P = 0.011) and more likely to use contraception in addition to condoms (34/71 versus 8/71; P < 0.001). They were less likely to be overdue for cervical screening (5/46 versus 19/48; P = 0.001), and more of those booked for antenatal care in the first trimester attended all follow-up appointments (28/37 versus 14/47; P < 0.001). Fewer parlour sex workers used heroin (4/71 versus 60/71; P < 0.001), crack cocaine (5/71 versus 62/71; P < 0.001) or injected drugs (2/71 versus 41/71 versus; P < 0.001). Parlour sex workers were less likely to be using drugs and spent less money per week on drugs, and also less likely to be sharing injecting equipment than street sex workers. Parlour sex workers had been older when they started selling sex (mean 23.1 years [range13–42] versus 20.8 years [range 12–40]; P = 0.067) compared with street sex workers. Parlour sex workers were more likely to want money for living expenses (41/71 versus 20/71; P < 0.001) than street sex workers, and unlike street sex workers, they were much less likely to be driven into sex work by the need to fund a drug habit (4/71 versus 34/71; P £ 0.001). They were also less likely to have experienced

	violence or been groomed to force them to sell sex (4/71 versus 15/71; P = 0.012). Parlour sex workers were more likely to be in sex work to accommodate the childcare and financial burdens of being a single parent (7/21 versus 0; P = 0.013). Parlour sex workers reported fewer episodes of intercourse per week (mean 14 versus 22; P < 0.001) with fewer different men (mean 11 versus 19; P < 0.001), less of whom were new (mean 8 versus 13; P < 0.001).
Implications of findings/ conclusions	When asked to suggest an appropriate service for their population, a few suggestions were common to both groups. These were a service location near their place of work, female health professionals, condom provision and counselling. Significantly more parlour sex workers suggested improvement in the existing sexually transmitted infection clinic service, a service that also included hepatitis B vaccination, contraception and health education and was separate from services for their general health, while street sex workers wanted a health service for all aspects of health and basic living needs, reflecting the relative social stability of parlour sex workers compared with the absence of even basic needs such as food and drink in the lives of street sex workers. They were also significantly more likely to want input from agencies for career support and financial advice than street sex workers. The two groups had very different health experiences, risk-taking behaviour and use of services. To be effective in improving health, different types of service delivered in different settings for different groups are required.
Limitations of research	-The inability to access and recruit from 2 of the 15 parlours may introduce bias, as many of those interviewed varied their place of work and reported working in more than one parlour in the city these effects would be limited. -There was a lapse of almost 3 years between data collection for each group. Some of the population differences noted could therefore be attributed to population change over time. -The small sample size for each group may mean that important differences have not reached significance. -The questionnaire used for parlour sex workers was based on that used for street sex workers and may not have addressed some potentially interesting issues in relation to trafficking, frequency of sexually transmitted infection and period of infectivity before treatment.
Relevance to review aims	Partly although focus not on recovery from substance use

Record	21
Author/s	Holly Johnson
Title	Drug use by incarcerated women offenders
Journal and page numbers	Drug and Alcohol Review, 25, 433 – 437
Year of publication	2006
Country where research took place	NSW, Australia
Recruitment site	470 women in six jurisdictions were interviewed for the DUCO female study. An attempt was made to interview all women sentenced to prison in each jurisdiction during a time-span of several weeks, but this was often not possible due to restricted admission and labour disputes in some jurisdictions. The overall response rate was 84%,
Sample description	This incarcerated population differs from the general female population in that they are younger, more poorly educated, more economically disadvantaged and more likely to be single. Indigenous women are overrepresented 27% of the sample as compared to 2% in the general population.
Key findings (relevant to the project)	Eight in 10 had ever used illegal drugs and 62% were regular users in the six months prior to arrest. Four in 10 women were regular users of more than one illegal drug. Cannabis was the most common drug cited, followed by illegal use of amphetamines, heroin and benzodiazepines. Among drug users, 38% were regularly using one type, 26% were using two types and 36% were using three types or more. The odds of regularly using illegal drugs were elevated for women who were young, unmarried, did not have children, had early exposure to drug problems among family members, experienced abuse in adulthood, earned income from crime or **sex work** and used amphetamines, benzodiazepines or morphine on prescription. In addition to age, marital status, exposure to family members with drug problems, adult victimisation, earning income through crime or **sex work** and prescription drug use, multiple drug use was predicted by low education, early involvement with the criminal justice system as a juvenile and having received a mental health diagnosis.
Implications of findings/ conclusions	There are important implications in these results for policy makers and for the development of interventions and treatment strategies to reduce drug use among women offenders. Interventions and treatment need to take account of the fact that substantial proportions of drug users regularly use more than one type of drug and that treatment focusing on a single drug type may not be effective in curbing drug use and associated harms. Results also indicate that, for many incarcerated women, drug use is just one of many problems requiring attention and treatment and that failure to address correlates of drug use, such as mental health problems and the effects of violent victimisation, may raise the risk of drug use relapse and poor success upon release from prison into the community. The fact that early exposure to drug-using family members is a risk factor for drug use points to the need for interventions to consider the impacts of drug use on other family members in terms of modelling behaviours and easy access to illegal drugs.
Limitations of research	The lack of data from New South Wales limits the generalisability of results to that state in particular. Limitations also lie with the self

	reported nature of responses and the biased sample. Incarcerated offenders not representative of all women offenders or drug users.
Relevance to review aims	No. Focus is on investigating the relationships between criminal offending and drug use, not for sex workers and SUD.

Record	22
Author/s	JO KIMBER, RICHARD P. MATTICK, JOHN KALDOR, INGRID VAN BEEK, STUART GILMOUR, JAKE A. RANCE
Title	Process and predictors of drug treatment referral and referral uptake at the Sydney Medically Supervised Injecting Centre
Journal and page numbers	Drug and Alcohol Review 27, 602–612
Year of publication	2008
Country where research took place	Kings Cross, Sydney's largest illicit drug market and sex work precinct. Australia
Recruitment site	Clients who attended Sydney Medically Supervised Injecting Centre (MSIC) at least once during the initial 18-month evaluation period, May 2001 to October 2002, were included in this study. Low-threshold drug services such as drug consumption rooms (DCRs) have been posited as referral gateways to drug treatment for injecting drug users (IDUs). We examined the process and predictors of drug treatment referral and referral uptake at an Australian DCR.
Sample description	The demographic characteristics of clients who were referred to drug treatment were largely similar to those who were not referred to drug treatment. Males had a higher rate of referral than females, and those who had completed high school had a higher rate of referral than those who did not complete high school. Clients reporting sex work in the month before registration also had a higher rate of drug treatment referral than clients who did not report recent sex work. The drug use histories of clients referred to drug treatment were also similar to those who were not referred. However, clients who injected on a daily basis or had heroin as their main drug in the past month had a higher rate of drug treatment referral than those who injected less frequently or mainly injected other drugs, respectively.
Design and methods	We undertook behavioural surveillance of the Sydney Medically Supervised Injecting Centre (MSIC) client cohort between May 2001 and October 2002. Data were collected for 3715 IDUs on demographics, injecting and drug use behaviours at registration and all subsequent MSIC service utilisation, including referrals.
Key findings (relevant to the project)	Sixteen per cent of clients who received written referrals to drug treatment had confirmed drug treatment referral uptake. Factors associated with drug treatment referral were frequent MSIC attendance [adjusted odds ratios (AOR=9.4], receipt of written health (AOR=4.8) or psychosocial (AOR=4.3) referrals, heroin as main drug injected (AOR=1.9) and completion of high school education (AOR=1.6). Factors associated positively with drug treatment referral uptake were recent sex work (AOR=2.6) and at least daily injection (AOR =2.3). Previous psychiatric illness or self-harm was associated negatively with drug treatment referral uptake (AOR=0.2). Those who had confirmed drug treatment referral uptake were almost three times as likely to report sex work. Factors associated independently with MSIC drug treatment referral uptake were daily injection. (AOR=2.3) and sex work in the month prior to registration (AOR=2.6).
Implications of	The local IDU and sex worker primary health care and drug treatment service, KRC, accounted for more than half the cases of confirmed

findings/ conclusions	referral uptake. Sex workers were also more than twice as likely to have This corresponds with other evidence that street-based sex workers use and benefit from low-threshold health and social services, such as MSIC and KRC, which are in locations and operating hours convenient to their work. Taken together, our findings add to the emerging evidence base that DCRs are an important referral gateway to drug treatment for IDUs. While subgroups such as daily injectors and sex workers are presenting for drug treatment assessment via the MSIC referral model, those with a history of mental health issues or lower educational attainment may require more intensive case management and referral.
Limitations of research	-A key study limitation was the lack of a control group, which for logistical reasons was not possible in our evaluation design. - There was also a dearth of any other local indicators on IDU referral and referral uptake. - Thus were unable to examine differences in help-seeking between MSIC clients and other IDUs, or compare the process and uptake of referrals at MSIC and other low threshold health services - The rate of referral uptake may also be a conservative estimate, as it is probable that some referral letters were not presented at the relevant agencies or not returned inadvertently by agencies.
Relevance to review aims	Yes.

Record	23
Author/s	Jo Kimber, Kate Dolan
Title	Shooting Gallery Operation in the Context of Establishing a Medically Supervised Injecting Center: Sydney, Australia
Journal and page numbers	Journal of Urban Health: Bulletin of the New York Academy of Medicine. Vol. 84, No. 2, 255-266
Year of publication	2007
Country where research took place	Sydney, Australia
Recruitment site	Participants were recruited through the Kings Cross site of the Australian Prevalence Estimation and Treatment Study (APET), a cross-sectional IDU survey, which used a snowball sampling approach undertaken in January 2001.
Sample description	Of 115 IDUs screened for the Shooting Gallery (SG) users survey, 31 (27%) reported SG use in the past 6 months. Two-thirds were female (n = 21) with a median age of 31.5 years (range 17 to 44 years). Almost all were daily injectors (n = 29), and three quarters (n = 23) reported heroin as their main drug injected. One-third were homeless (n = 10), and two out of five had sex worked in the past month (n = 13). One in five had used SGs daily (n = 6) in the past month. The 17 IDU key informants comprised 13 males and 4 females. Their median age was 33 years (range 21 to 46 years). Seven were living in unstable accommodation. Frequent (n = 9) and occasional injectors (n = 8) were similar in number, and heroin was the most common primary drug (n = 8) followed by methamphetamine (n = 5) and cocaine (n = 4).
Design and Methods	An exploratory survey of SG users ($n = 31$), interviews with SG users ($n = 17$), and drug workers ($n = 8$), and counts of used needles routinely collected from SGs (6 months before and after MSIC) and visits to the MSIC (6 months after MSIC) were triangulated. Shooting galleries (SGs) are illicit off-street spaces close to drug markets used for drug injection. Supervised injecting facilities (SIFs) are low threshold health services where injecting drug users (IDUs) can inject pre-obtained drugs under supervision. This study describes SG use in Kings Cross, Sydney before and after the opening of the Sydney Medically Supervised Injecting Centre (MSIC), Australia's first SIF. Operational and environmental characteristics of SGs, reasons for SG use, and willingness to use MSIC were also examined.
Key findings (relevant to the project)	Five SGs operated during the study period. Key operational characteristics were 24-h operation, AUS$10 entry fee, 30-min time limit, and dual use for sex work. Key reasons for SG use were to avoid police, a preference not to inject in public, and assistance from SG operators in case of overdose. SG users reported high levels of willingness to use the MSIC. The number of used needles collected from SGs decreased by 69% (41,819 vs. 12,935) in the 6 months after MSIC opened, while MSIC visits increased incrementally.
Implications of findings/ conclusions	We conclude that the majority of injections from SGs were transferred to MSIC within its first 6 months of operation, but SGs continued to accommodate injections in Kings Cross. This probably reflects ongoing demand for off-street places to inject outside of MSIC hours of operation. In addition, the dual use of SGs by street-based sex workers highlights the important ongoing role of SGs to this vulnerable group. Taken together, our findings reinforce the importance in

	Kings Cross and similar settings of maintaining harm reduction outreach to SGs alongside SIF operation, as SIFs are unlikely to achieve total injection coverage. Furthermore, as SIFs are a niche intervention, the need remains to acknowledge and strengthen safer environment interventions embedded within existing spatial relations.
Limitations of research	-This study was limited by the survey's small sample size and day time only fieldwork; thus, the findings may not be representative of SG users, especially primary cocaine users and sex workers who primarily use in the evening. -The needle counts are only an indicator of the number of injections taking place at SGs during the study period, and this may have been impacted by changes in patterns of drug use in 2001 due to the Australian heroin shortage.
Relevance to review aims	Potentially although focus is not on recovery.

Record	24
Author/s	Kurtz, Steven P, Surratt, Hilary L, Kiley, Marion C., Inciardi, James A.
Title	Barriers to Health and Social Services for Street-Based Sex Workers
Journal and page numbers	Journal of Health Care for the Poor and Underserved, Volume 16, Number 2, 345-361
Year of publication	2005
Country where research took place	Miami, Florida, USA
Recruitment site	Employed active sex workers as client recruiters, these had access to and credibility with a variety of local drug user and sex worker networks. Using standard multiple-starting-point snowball sampling techniques and chain referral strategies in specific neighborhoods where rates of drug use and sex work are known to be High. The use of multiple starting points and numerous client recruiters eliminates the problem of drawing all respondents from only one social network. The project's intervention center is located just east of Miami's Biscayne Boulevard, an 80-block stretch at the lower end of the Boulevard is a major sex worker "stroll."
Design and methods	The present study utilized interview (n = 586) and focus group (n = 25) data to examine the service needs and associated barriers to access among women sex workers in Miami, Florida
Sample description	Some 78% of the participants were over 30 years of age, and over half (52.4%) had less than a high school education. For reasons already noted, the sample is largely African American and non-Hispanic white/Anglo. As evidence of the women's social isolation, fewer than 12% lived with a husband or other committed partner. Although a sizeable majority (66%) had children younger than 18, few respondents (28.4%) lived with their children. Most often, the children lived with a grandparent. A small majority (56.8%) received at least some legal income, which largely consisted of government assistance (30.2%) and/or family (37.5%) support. Almost none (5.6%) received income from legal employment. Almost half (42%) of the participants responded affirmatively to be currently homeless. Of these, 131 women reported living on the streets, 69 in someone else's home or apartment, 32 in shelters, and 14 in a variety of other places. Crack was used by almost as many respondents as alcohol. Few of the women were current injection drug users.
Key findings (relevant to the project)	**Perceived health care and social service needs: Survey data:** A surprisingly large proportion (17.5%) of homeless women either said they did not know or said they needed nothing. Interviewers or staff reported that such responses most often came from women who projected an aura of self-sufficiency and bravado despite their circumstances. Shelter and employment were the other most common responses, with some form of mental or physical heath care cited next most often. Homeless women's responses did not vary greatly from those of the total sample, with the single exception of shelter, cited by 41% of self-reported homeless women. **Perceived health care and social service needs:** Focus group data (described in table 5, see below)**. Barriers to access** can be broadly categorized as structural or as individual (see table 6). *Individual barriers.* Structural and individual barriers intersect in ways that often make problems self-perpetuating for street-based sex workers.

	1. Lack of access to water, showers, and hygiene products increases the likelihood that a woman will be refused help or employment. 2. The inability to find shelter at hours of the day compatible with their lives leaves women on the street, and at increased vulnerability to violence, heavier drug use, and loss of self-esteem. Some women said they smoked crack all night on the streets so they would not risk being raped while asleep. 3. Living on the street increases drug seeking and use, making women less able to make the decisions necessary to find help. 4. Life on the streets hardens many women, leading them to expect social disdain, discrimination, and marginalization, so that they assume no one truly cares even when social service providers do offer assistance. 5. Drug use and street life foster the loss of social and communication skills, impatience, fear of authority figures, and a loss of sense of social time. Women often arrive late or on the wrong day for appointments and/or they are not willing to wait in line for service. 6. A lack of legal identity, address, and/or status causes women to be ineligible for most employment, and also to fear arrest on loitering, solicitation, and drug possession charges when going for help. Women said the latter was especially worrisome when seeking health care.
Implications of findings/ conclusions	Although acute physical needs must be met before other concerns can be addressed, focus group discussions pointed out that higher level needs vary depending on a woman's individual circumstances. The findings elaborated here also suggest that social service and health care staff members (including administrative, reception, and secretarial staff) would benefit from training designed to increase their sensitivity to the needs, fears, social disconnectedness, and secretiveness of many street-based sex workers. At the same time, there are some structural barriers to service for sex workers that would be difficult or impossible to eliminate in the context of shelter provision for a more general. The goal of such research would be to find effective ways to increase women's empowerment and reduce their marginalization to the extent that they can successfully navigate the complex web of social service and health care entities that exists in every community. Such efforts might include providing an intermediate level of case management, perhaps including former drug-involved sex workers in key support roles, to keep clients engaged and on a path toward making consistent, if small, steps to getting care and treatment homeless population. Research designed to improve service provision to drug-using populations by way of the involvement of peer facilitators appears to be a useful direction for future investigation.
Limitations of research	Limitations were resolved in this way: Although it is impossible to select a truly random sample of street-based sex workers, the quantitative data presented here are drawn from a very large number of drug involved women who work a single city stroll in Miami. Furthermore, recruitment was accomplished through the efforts of many different recruiters, limiting the introduction of social network bias into these data. Although the focus groups were conducted among only a small subsample of the project's clients, there were broad areas of agreement across groups concerning the prioritization of needs and barriers to accessing services. Furthermore, although Miami's drug-involved, street-based sex workers may not share all of the characteristics of homeless women in other cities, our findings are generally supported by other studies of the health and social service needs, and some of the

	barriers to access, of highly marginalized women.
Relevant to review aims	Yes in relation to accessing services and service needs for marginalised women.

Table 5.

FOCUS GROUP DATA: SOCIAL SERVICE NEEDS OF INDIGENT WOMEN SEX WORKERS IN MIAMI

Physical needs	Mental/emotional needs	Health care needs	Longer term needs
Survival	Friendship	Drug detoxification	Legal
Food	Counseling	Drug treatment	Mailing address
Water	Crisis intervention	Pregnancy/reproductive care	Photo identification
Clothing	Domestic violence protection	HIV/hepatitis/STI care	Immigration papers
Showers		Physical trauma care	Social Security number
Sanitary products		General medical care	Social stability
Condoms		Dental and eye care	Housing
Toiletries			Physical rehabilitation
Space			Employment services
Shelter			Mental health services
Possessions storage			Child custody/child care help
Money storage			
Food storage/preparation			
Services			
Telephone			
Laundry			
Transportation			

Abbreviation: STI: sexually transmitted infection.

Table 6.

FOCUS GROUP DATA: BARRIERS TO HEALTH AND SOCIAL SERVICES ACCESS FOR INDIGENT WOMEN SEX WORKERS IN MIAMI, FLORIDA

Structural barriers	Individual barriers
Availability	Awareness of service
Information accessibility	Drug seeking and use
Transportation	Street life distractions/sense of time
Legal status requirements	Mental/emotional stability
Social stigma	Fear of arrest
Program staff communication skills	Generalized fear
Program target population	Client communication skills
Program structure	Client dress/appearance
	Negative attitude
	Low frustration tolerance

Record	25
Author/s	Joseph T.F. Lau, Hi Yi Tsui, Yun Zhang, Feng Cheng, Linglin Zhang, Jianxin Zhang, Ning Wang
Title	Comparing HIV-related syringe-sharing behaviors among female IDU engaging versus not engaging in commercial sex
Journal and page numbers	Drug and Alcohol Dependence 97, 54–63
Year of publication	2008
Country where research took place	Sichuan, China
Recruitment site	Data obtained from all female IDU respondents of the Behavioral Surveillance Surveys (BSS) of the China–UK HIV/AIDS Prevention and Care Project which were conducted in 15 sites in Sichuan during 2003 through 2005 were used in this study (n = 1923).
Design and methods	As no sampling frame of non-institutionalized IDU exists, community-based snowballing was used to recruit respondents. Response rate not reported.
Sample description	1923 female IDUs – Female sex workers (FSW)=792, Non-FSW= 1131. Of the FSW and non-FSW respondents respectively, 38% and 26% were aged 24 or less; 17.6% and 25.3% attained senior high school education; 54.9% and 39.1% had injected drugs for 3 or more years; 80.7% and 90.8% had attempted to quit drugs. Respectively 45.6% and 60.6% of these two groups were currently having regular sex partners and 50.5% and 16.7% were having non-regular sex partners. Furthermore, respectively 42.7% and 38.4% of the FSW and non-FSW respondents had received voluntary HIV antibody testing and 34.9% and 22.6% respectively received STD examinations whereas 44.8% and 34.9% participated in harm reduction programs and 49.8% and 25.2% received free condoms or lubricants.
Key findings (relevant to the project)	The prevalence of having at least one of the three syringe-sharing behaviors (borrowing, lending, or injecting from pre-filled syringes) was 45.3% in the female sex workers (FSW) group and 37.2% in the non-FSW group (adjusted OR= 1.28, $p < 0.05$). Compared with non-FSW, FSW were more likely to have injected drugs for 3 or more years, have non-regular sex partners, believe that condom use could prevent HIV, and have received free condoms/lubricants (OR = 1.34–5.08, $p < 0.05$); FSW were less likely to be older, better educated, and have attempted quitting drugs (OR = 0.31–0.68, $p < 0.05$). Being FSW, older, longer injecting drug use, higher drug injection frequency, and having regular sex partner were associated with injecting with others' used syringes (multivariate OR= 1.26–1.92, $p < 0.05$) while the reverse was true for education level and voluntary HIV antibody testing (multivariate OR= 0.44–0.64, $p < 0.05$). Of all sampled FSW, 39.3% did not use a condom in the last episode of sex work.
Implications of findings/	This study presents some encouraging findings that utilization of various HIV-related services (e.g., voluntary HIV antibody testing services) was associated with lowering syringe-sharing

conclusions	behaviors. It seems that though some potentially effective services were made available to the respondents during the study period, such services were inadequate to revert the observed risk differential in terms of syringe-sharing behaviors between the FSW and the non-FSW in the IDU population. HIV prevention among female IDU who are also FSW is therefore an uphill battle. Those having regular sex partners were more likely than others to be syringe sharers. It is likely that some of these regular partners were also IDU and syringes were more likely to be shared under those circumstances. HIV workers in China should give higher priorities for HIV prevention to this double-risk group (female IDU who were FSW). Higher priorities should be given to this group in utilizing MMT services. Currently, MMT users should be local residents who are of age 20 or above and who had attempted unsuccessfully to quite drug use, or those who are HIV positive. Many female IDU who are FSW would hence not be eligible to use the service. The MMT services should also be integrated with other supportive services. Attention should also be given to the high risk sexual behaviors practiced by this group.
Limitations of research	-Random sampling of non-institutionalized IDU was not feasible and snowball sampling was used. - Bias due to social desirability might exist although respondents were assured of strict anonymity and privacy of the interviews. - Third, certain respondents might have been interviewed more than once but this number should be relatively small.
Relevance to review aims	No. Focus on HIV prevention

Record	26
Author/s	Jane Litchfield, Andrew Maronge, Tim Rigg, Benjamin Rees, Ravi Harshey, Jenny Keen
Title	Can a targeted GP-led clinic improve outcomes for street sex workers who use heroin?
Journal and page numbers	British Journal of General Practice, 514-516
Year of publication	2010
Country where research took place	Derby, UK
Recruitment site	This study looks at outcomes of a primary care drugs treatment intervention for street sex workers who use heroin, using prescribed maintenance treatment with intensive health and psychosocial support. All patients entering treatment in the street sex workers' clinic at the GP-led Bradshaw Clinic between October 2006 and May 2007 were eligible for entry in the study. Forty-two patients fulfilled the entry criteria. Six could not be included as researchers were unable to meet them to gain consent; two refused consent. Retention in the study at 1 year was 100%.
Design and methods	The targeted sex workers' clinic was designed to provide a more intensive 'one-stop shop' for female sex workers who use heroin in order to offer them a range of medical, social, and drug treatment services including prescribed treatment for heroin addiction, contraception, and sexual-health interventions. Referrals were invited from any source but came particularly from a local street agency offering nonmedical support and outreach to street sex workers. Once they had started on a prescribed treatment programme for their heroin use (usually methadone maintenance), patients were able to access sexual health interventions and advice, as well as specialised keyworking and psychosocial interventions as required. Urine samples were routinely taken prior to treatment and at intervals thereafter, testing not only for illicit opiates, but also for compliance with prescribed substitute medication. All patients entering treatment in the street sex workers' clinic at the GP-led Bradshaw Clinic between October 2006 and May 2007 were eligible for entry in the study. Inclusion criteria were that: • the participant was a female heroin user entering the specialist clinic; and • the participant had offered sex for money within the previous 4 weeks.
Sample description	N= 34 female heroin users entering and had offered sex for money within the previous 4 weeks. Not more characteristics are reported.
Key findings (relevant to the project)	**Involvement in sex work** (self report). Of 34 women who were sex workers at the beginning of the study, only 11 (33%) reported being involved at 1 year. **Heroin use** (percentage of positive urine samples). Of 30 urine samples nearest to entry, 26 (87%) were positive for heroin compared with 21 out of 29 (72%) at 1 year (+/- 1 month). Quality of life had improved significantly and heroin use had reduced.
Implications of findings/	34 sex workers were successfully engaged with GP-led primary care drug

conclusions	treatment services in Derby for over a year. Improve the health and wellbeing of the sample, as measured by the Christo score. After a year of treatment the proportion reporting involvement in sex work had dropped to 33%. Heroin use decrease from 87% at entry to 72% at 1 year. In the context of an abstinence-based government treatment policy, it is pertinent to note that total abstinence from heroin use does not appear to be a precondition for stopping street sex work.
Limitations of research	-Very little published data. -Difficult to carry out a randomised controlled study, as control participants are not available. -It relies, to a large extent, on self-reported data. -Relies on repeated measures for a single self-selected cohort and confounding variables, such as readiness to change, cannot be excluded. - Regression to the mean would tend to reduce the number of sex workers and heroin users over time; it has not been possible to control for this effect.
Relevance to review aims	Yes. This study indicates that GP-led primary care interventions, targeted specifically at treating opiate addiction in this group, can be effective not only in improving health and wellbeing, but also in achieving an end to working on the streets for some women.

Record	27
Author/s	Elisa Lloyd-Smith, Beth S Rachlis, Diane Tobin, Dave Stone, Kathy Li, Will Small, Evan Wood, Thomas Kerr
Title	Assisted injection in outdoor venues: an observational study of risks and implications for service delivery and harm reduction programming
Journal and page numbers	Harm Reduction Journal, 7:6
Year of publication	2010
Country where research took place	Vancouver, Canada
Recruitment site	From the Vancouver Injection Drug Users Study (VIDUS). VIDUS is an open prospective study that has followed 1603 IDU recruited through self-referral or street outreach from Vancouver's DTES since May 1996. Vancouver, Canada's Downtown Eastside (DTES) a neighbourhood characterized by extreme poverty, high crime, homelessness, poor housing, and high rates of alcohol and drug abuse. All subjects receive a $20 stipend at each visit.
Design and methods	Using data from the Vancouver Injection Drug Users Study (VIDUS), an observational cohort study of IDU, generalized estimating equations (GEE) were performed to examine socio-demographic and behavioural factors associated with reports of receiving assistance with injecting in outdoor settings
Sample description	In total, 620 participants were eligible for inclusion. Our study included 251 (40.5%) women and 203 (32.7%) self-identified Aboriginal participants. The median age of the sample was 31.9 (Interquartile range 25.4-39.3), 251 (40.5%) participants were female, and 203 (32.7%) self-identified as Aboriginal.
Key findings (relevant to the project)	The proportion of VIDUS participants who reported assisted injection outdoors varied with each follow-up between 2004 and 2005 and ranged between 8% and 15%. In multivariate analyses, assisted injection outdoors was positively associated with being female (Adjusted Odds Ratio (AOR) = 1.74, 95% Confidence Intervals (CI): 1.21-2.50), daily cocaine injection (AOR = 1.70, 95% CI: 1.29-2.24), and sex trade involvement (AOR = 1.44, 95% CI: 1.00-2.06). Aboriginal ethnicity remained negatively associated with the outcome (AOR = 0.58, 95% CI: 0.41-0.82).
Implications of findings/ conclusions	Sex trade involvement was associated with reporting assisted injection outdoors, and this association was independent from the association of female sex. When drugs are shared among sex workers and their clients, some clients are assuming responsibility for the preparation and administration of drugs. Further, in our setting, Shannon et al. recently demonstrated that individuals involved in sex trade work are being pushed to work and inject in remote outdoor

	locations due to heavy police presence and laws that prevent sex workers from working in regulated indoor sex work venues. The displacement of sex work into outdoor settings may explain the association between sex work and outdoor assisted injection locally. Our results support further development of genderbased interventions that build personal capability to self inject. These initiatives are currently supported by the SIF and the IST, but their role could improve if the capacity of these services was increased. Increasing number and types of services offered by the IST, who do not receive compensation for the injection related support they provide, could reduce the drug related harm in this setting. The dynamic of ingrained injection routines and assisted injection by intimate partners or clients of sex trade workers need to be acknowledged and considered when developing interventions specific to females and sex trade workers. Being female was also associated with receiving assistance with injecting in outdoor settings. Females require help because are more likely to report that they do not know how to inject themselves. Also reporting assisted injection outdoors was associated with daily cocaine injection. Due to cocaine's short half-life, there is a need to inject more often in order to maintain a high and may have reduced ability to selfadminister injections, and abscesses and cellulitis, can result in vascular damage, which may impair the ability of IDU to administer their own injections.
Limitations of research	-VIDUS is not a random sample, findings from this analysis are not necessarily generalizable to the wider population of IDU in our setting or elsewhere. - May also not be generalizable to cities with different climates from Vancouver. -Self-report data regarding drug and injecting practices, our analysis could be subject to social desirability bias. - Unmeasured factors predictive of high-risk activity among IDU, including social network dynamics and membership in a large socio-metric risk network, are not incorporated into our analysis. -Other potential explanatory factors specific to the outdoor injecting environment, such as lack of a physically clean space and inadequate lighting.
Relevance to review aims	Partially. Focus not on recovery from substance abuse

Record	28
Author/s	Winnie K. Luseno, Wendee M. Wechsberg, Tracy L. Kline, Rachel Middlesteadt Ellerson
Title	Health Services Utilization Among South African Women Living with HIV and Reporting Sexual and Substance-Use Risk Behaviors
Journal and page numbers	AIDS PATIENT CARE and STDs, Volume 24, Number 4, 257- 264
Year of publication	2010
Country where research took place	Pretoria, South Africa
Recruitment site	Participants for this study were recruited through targeted street outreach in neighborhoods and townships in or within close proximity to Pretoria.
Design and methods	The data were collected between June 2004 and May 2008. Among the 203 participants with positive HIV test results, 177 (87%) and 185 (91%) returned for their 3- and 6-month follow-up assessments, respectively.
Sample description	The mean age of the participants was 29 years, with approximately 82% under age 35. Slightly over 25% of the participants had a primary education or less; about 30% were single, and about 82% had traded sex in the past 90 days. About three quarters of the participants had given birth, a little under three quarters were financially supporting others, and slightly less than half had a monthly income under ZAR 450=- (USD 75=-). Approximately two thirds of the participants reported their health status as good, fair, or poor. The mean number of STD symptoms in the past 90 days was approximately four, with about 62% of participants reporting three or more symptoms. Results were similar for the mean number of physical health concerns.
Key findings (relevant to the project)	The study findings suggest that denial of HIV status may be a barrier to care, leading study participants to avoid utilizing health services specific to their disease and to prefer more general medical care services. Also suggest a reduced likelihood of health services utilization among participants who met DSM-IV criteria for drug abuse as well as participants with greater numbers of poor physical health symptoms. Other factors associated with a higher likelihood of health services utilization in this study are sociodemographic in nature, including financially supporting others and sex trading. In the South African context, it is possible that among marginalized and underserved women, sex workers as well as women who are financially supporting others had greater access and means to obtain health care services. This suggests that these factors may work as both predisposing and enabling variables. This finding, however, warrants further exploration.
Implications of findings/ conclusions	The findings suggest an urgent need to promote HIV prevention and early testing, to strengthen long-term HIV care services, and to increase access to services.

Limitations of research	-A key limitation of the data was the small sample size (n=203), which resulted in the selection of a parsimonious estimation model. -Second, selection bias may limit the generalizability of the findings to all HIV-infected women with high-risk substance use and sex risk behaviours in South Africa. -Third, limitations of self report data may also apply, including errors in recall, which may be affected by substance use and social desirability with respect to health status. - Some measures of factors that may affect care utilization patterns were not available, for example, previous experiences with health care services before HIV diagnosis and stigma related to HIV or accessing HIV care.
Relevance to review aims	No. Recovery not focus of paper This study aimed to address this gap in the literature by identifying factors associated with health service utilization in a sample of poor, underserved South African women with sexual and substance use risk behaviours and recent HIV-positive test results. Selected key findings related to sex workers

Record	29
Author/s	Kirsten Marchand, Eugenia Oviedo-Joekes, Daphne Guh, David C Marsh, Suzanne Brissette, Martin T Schechter
Title	Sex work involvement among women with longterm opioid injection drug dependence who enter opioid agonist treatment
Journal and page numbers	Harm Reduction Journal, 9:8
Year of publication	2012
Country where research took place	Montreal, Quebec, Vancouver, British Columbia, Canada
Recruitment site	*Not more reported in Reference 24 about recruitment site
Design and methods	Data from a randomized controlled trial, the North American Opiate Medication Initiative (NAOMI), conducted in Vancouver and Montreal (Canada) between 2005-2008, was analyzed. The NAOMI study compared the effectiveness of oral methadone to injectable diacetylmorphine or injectable hydromorphone, the last two on a double blind basis, over 12 months. A research team, independent of the clinic services, obtained outcome evaluations at baseline and follow-up (3, 6, 9, 12, 18 and 24 months). The North American Opiate Medication Initiative (NAOMI) was an open-label, phase III RCT comparing supervised injected diacetylmorphine (the active ingredient in heroin) and oral methadone in the treatment of long-term opioid dependence. Participants' profile, study design, methodology and results of the parent study have been published elsewhere [24-26]. Briefly, eligible participants were at least 25 years of age, with a minimum of 5 years of opioid dependence, current daily injection of opioids, at least two prior treatment attempts for opioid dependence (including at least one OAT), and no enrolment in OAT within the prior 6 months. A computer-generated randomization list of permuted blocks of two, four, and six was used. Patients were assigned to receive diacetylmorphine, methadone, or hydromorphone in a 45:45:10 ratio. Randomization was stratified according to center and according to the number of previous methadone treatments (two or fewer vs. three or more). Eligible participants were instructed to go to the treatment clinic on the following Monday morning, at which time they were first informed of their treatment assignment. Of the 97 women entering treatment, we obtained outcome measures for 81 women at 24 months (83.5%) for this analysis.
Sample description	N=251: Methadone N=111, Diacetylmorphine N=115, Hydromorphone N=25. The majority of the participants are from Vancouver. Mean age was 39 years. 154 were male sex. 10 years as mean of school education. 183 living like Homeless or living in shelter or single-occupancy hotel room. 16 years mean of injection-drug use, 158 are HCV positive and 24 HIV positive. The severity of the opioid dependence in enrolled patients was indicated by long histories of injectable drug use, extensive involvement in criminal

	activity, and multiple attempts at treatment.
Key findings (relevant to the project)	A total of 52 (53.6%) women reported being involved in sex work in at least one of the seven research visits, while 10 of the 52 women were consistently involved in sex work. At treatment initiation, women who were younger (OR for every 5 year increase in age = .76; 95% CI = .57,1.00; p= .05) and had fewer years of education (OR for each additional year of education = .81; 95% CI = .66,1.01; p = .055) were more likely to be engaged in sex work. Also more likely among women with poorer scores in social relations, greater physical and psychological health symptoms and more days of illicit heroin, cocaine and injection drug use in the prior month. Those with the most frequent daily injection (≥ 7) were more likely to report sex work in the prior 30 day.
Implications of findings/ conclusions	When examining factors associated with sex work involvement during the study period, women with poorer treatment outcomes were more likely to engage in sex work. Specifically, lower treatment retention, poorer scores in social relations and health related quality of life, more days of illicit drug use, injection drug use, and more frequent daily injection in the prior 30 days. These findings indicate that sex work was more likely among a subgroup of women who did not fully benefit from OAT, a noteworthy finding considering that OAT has shown to reduce many of the harms associated with long-term heroin use. Moreover, in the present study women who were retained successfully in OAT were less likely to be involved in sex work and therefore experienced a reduced vulnerability to harms caused by injection drug use, this indicates that those involved in sex work were more likely to drop-out of treatment. The results of the present study complement prior research in the context of a prospective design that allowed us to capture predictors of sex work involvement over a 24 month study period. After engaging these participants in OAT,women who continued engaging in sex work were more likely to continue using heroin and cocaine, independent of OAT retention. Thus, many women continued engaging in survival sex work and using illicit heroin, despite that OAT improves retention and reduces illicit heroin use. The complexity of the relationship between OAT effectiveness and its impact on sex work engagement requires further study. Education is regarded as a strong indicator of social and health-related inequalities [31], and women with fewer years of education were more likely to engage in sex work at treatment initiation. These findings indicate that women with less education experience further vulnerabilities even within a population with very low socio-economic status. Therefore, those who provide addiction treatment services must consider this special circumstance, acknowledging women's financial needs and the stigma attached to sex work, so that services and policies do not further exclude these groups. Findings of this study suggest that injection drug using women engaged in sex work represent a highly vulnerable group with poorer psychological health and a greater use of heroin and cocaine while receiving OAT.
Limitations of research	- Several gender sensitive and sex work specific-related questions were not part of the study evaluation package (e.g., partner's use of illicit substances, income earned from sex work to support heroin use), that data would have provided a more detailed picture of the situation. -The trial was not designed to investigate factors associated with

	sex work and we had a small sample size additional. -Reasons for sex work involvement during treatment, the proportion of earnings used from sex work to support illicit drug use, and information regarding the people who depend on an individual involved in sex work, should be captured.
Relevance to review aims	Partly but does not focus on recovery.

*Oviedo-Joekes E, Brissette S, Marsh DC, Lauzon P, Guh D, Anis A, Schechter MT: Diacetylmorphine versus methadone for the treatment of opioid addiction. N Engl J Med 2009, 361:777-86.

Record	30
Author/s	Rachel L. McLean, Jacqueline Robarge, Susan G. Sherman
Title	Release from Jail: Moment of Crisis or Window of Opportunity for Female Detainees?
Journal and page numbers	Journal of Urban Health: Bulletin of the New York Academy of Medicine, Vol. 83, No. 3
Year of publication	2006
Country where research took place	Baltimore, USA
Recruitment site	148 adult female detainees in the Baltimore City Detention Center between January 21 and March 17, 2005.
Design and methods	Subjects were recruited using randomly generated numbers from a sampling frame of 450 eligible beds distributed between 11 dorms (ten general population dorms and the Therapeutic Community) and individual cells.
Sample description	More than half (54%) of female detainees anticipated stable housing upon release. The median age of female detainees was 37; 69% self-identified as African-American, and 33% identified as lesbian or bisexual. The median income in the 30 days prior to arrest was $145 (IQR: 0, 559), and the median number of prior arrests was 5 (IQR: 3, 11). The median number of days detained was 46.5 (IQR: 29, 97.5). The 29% of respondents who knew their release date had a mean of 28 days until release (standard deviation [SD] = 35). 38% anticipated staying with a family member, 16% at their own home. 5% of respondents reported being infected with HIV, 14% with HCV, and 40% reported ever having an STI. 59% reported having been diagnosed with depression, 33% with bipolar disorder, 28% with anxiety, and 9% with schizophrenia. At the time of interview, 4% of participants reported being pregnant.
Key findings (relevant to the project)	Almost half of female detainees reported a perceived lack of stable housing availability upon release. Familial support and a monthly income of $400–799 were significantly positively associated with perceived housing stability upon release; wanting a support group for issues surrounding engagement in sex work was significantly negatively associated with perceived housing stability upon release.
Implications of findings/ conclusions	Female detainees have unique needs that warrant special attention. This study suggests the importance of pre-release planning and continuity of care for female detainees. With nearly half of the sample anticipating a lack of housing stability upon release, pre-release planning efforts should be provided to connect detainees with affordable housing opportunities. Additionally, the protective effects of monthly incomes above $400 suggest a need for programs focused on income generation through employment, vocational training, and assistance with accessing public benefits. Then, interventions should emphasize access to housing, economic opportunity and family reunification. Special attention is warranted to those who have engaged in sex work, who may be marginalized from family and service-based

	support networks.
Limitations of research	-The cross-sectional nature of this study limits the ability to determine the temporal direction of the associations found here. -The study had a small sample size, which limited its statistical power, and lacked a male detainee or female prisoner sample for comparison. -Our findings may not be generalizable, because participants in this sample may have been unable to afford bail and may have come from a more socially isolated or economically deprived group. -this study failed to ascertain the prevalence of PTSD among participants. - Questions regarding sensitive topics such as drug use and sexual risk behavior relied on self-report and may have elicited socially desirable responses. -Alternate definitions of housing stability may have yielded different results.
Relevance to review aims	Yes. Service needs discussed.

Record	31
Author/s	Azar Mehrabadi, Kevin J.P. Craib, Katharina Patterson, Warner Adam, Akm Moniruzzaman, Barbara Ward-Burkitt, Martin T. Schechter, Patricia M. Spittal
Title	The Cedar Project: A comparison of HIV-related vulnerabilities amongst young Aboriginal women surviving drug use and sex work in two Canadian cities
Journal and page numbers	International Journal of Drug Policy 19, 159–168
Year of publication	2008
Country where research took place	Vancouver, Prince George, Canada
Recruitment site	Participants in both cities were recruited through referral by health care providers, community outreach, and by word of mouth. The majority of youth who participate in the study were recruited by word of mouth (39%) and outreach staff (32%).
Design and methods	Convenience sample. Cross-sectional study. All females from the overall cohort who completed the baseline questionnaire from October 2003 to July 2005 were included in the analysis.
Sample description	N= 262 females. 154 participants (59%) reported that in the past 6 months they were involved in sex work, whilst 185 (71%) reported having been involved in sex work at some point in their lifetime. The median age at enrolment was 23 years old. Out of all females in this study, 169 (65%) reported ever having injected drugs; out of 260 participants, 34 (13%) had HIV antibodies, whilst out of 250 participants 109 (42%) had HCV antibodies. Women who were recently involved in sex work were significantly more likely to have ever been on the street longer than three nights (71% vs. 54%, $p = 0.004$) and to be HCV positive (49% vs. 36%, $p = 0.031$). 85% of women involved in recent sex work and 84% of women not involved reported not having completed high school ($p = 0.351$). Incarceration in the last 6 months was 15% and 17% for women involved in recent sex work and for those women who were not involved, respectively ($p = 0.721$). Sexual abuse was high for both women who were recently involved with sex work and those who were not at 76% and 61%, respectively ($p = 0.009$).
Key findings (relevant to the project)	Women involved in recent sex work were more likely to report ever having injected drugs, recent (in the last 6 months) daily use of non-injection crack, injection cocaine use, injection opiate use, and injection speedball use (all p-values < 0.05). There was no significant difference in needle borrowing and sharing. However, women involved in sex work were more likely to report daily use of the needle exchange site in the past 6 months, and to report runs or binges with injection drugs in the past 6 months. Women involved in sex work showed no detectable difference in their likelihood to be enrolled in methadone maintenance treatment (MMT) ($p = 0.359$). In terms of condom use and sexual experiences, we found no evidence to suggest unsafe sex with casual or regular partners, or ever being pregnant was associated with recent sex work involvement. However, the high level of pregnancy for both groups of women is noteworthy, as is the low level of condom use with casual and regular partners in both groups. It is also worth mentioning that a relatively high percentage of women involved in sex work (90%) reported always using condoms with clients in the last 6 months. The analysis revealed that women who were involved in sex work in the last 6 months were more likely to smoke crack daily in the prior 6 months (Adjusted OR= 2.93; 95% CI: 1.64, 5.22) and inject cocaine daily in the prior 6 months (Adjusted OR= 4.40; 95% CI: 1.91, 10.14). Women in Prince George were slightly younger than those in Vancouver, There was no significant difference in the prevalence of HIV or Hepatitis C amongst those involved in sex work

	in the two cities. Daily opiate use was significantly higher amongst women involved in sex work in Vancouver. The levels of incarceration and living on the street were not significantly different in the two cities. There was no significant difference in the two cities in the proportion who had attempted suicide, who reported recent or lifetime bad dates, orwhohad ever used injection drugs.
Implications of findings/ conclusions	The study highlights that Aboriginal women who are involved in sex work and use illegal drugs across British Columbia face increased violence, frequent intravenous drug use, and current and childhood sexual trauma. When designing new programming, service providers must remain mindful of the interconnection between discrimination and patterns of violence against Aboriginal women, as well as histories of mistrust towards both provincial and federal authorities in Canada. Peer driven programming prioritising physical and emotional safety are urgently required. Client driven, round the clock drop in centres may afford the opportunity for street involved women involved in sex work to be safe, be warm, find food, and take a shower in non judgmental environments accepting of sexual diversity. Such places should also offer women the opportunity to fix their drugs safely and access drug treatment. Any efforts to help alleviate the impact of sex and drug-related harm in both rural and urban settings must be inclusive of the perspectives of the Aboriginal young women involved and afford them the opportunity to provide leadership in the decisions made about appropriate harm reduction and sexual health programming.
Limitations of research	-As a probability sampling framework is not available for the population under study, recruitment for the Cedar study was non-random. -Snowballing methodology, has however been said to be biased towards individuals who have many interrelationships and miss individuals who are socially isolated. -Our data are self-reported; therefore participants may under-report those behaviours that are illegal or stigmatising. -The com parison group of women is an extremely vulnerable sample themselves, one-third of women had been involved in sex work at some point in their lifetime, although not in the past 6 months. -It is noteworthy that in the analysis we have not examined causation. It is therefore not possible to determine whether the associated factors have a causative or predictive effect. -Due to the limited focus of the population under study, generalisations cannot be made to the general population
Relevance to review aims	Partly although does not focus on recovery

Record	32
Author/s	Cari L. Miller, Sarah J. Fielden, Mark W. Tyndall, Ruth Zhang, Kate Gibson, Kate Shannon
Title	Individual and Structural Vulnerability Among Female Youth Who Exchange Sex for Survival
Journal and page numbers	Journal of Adolescent Health 49, 36–41
Year of publication	2011
Country where research took place	Canada
Recruitment site	Between 2006 and 2008, street based Female Street Workers (FMSs) living in the lower mainland of Vancouver, British Columbia, Canada, were enrolled in an open, prospective cohort and were asked to participate in an interview-based questionnaire and voluntary HIV screening at baseline and also at follow- up visits carried out every 6 months. Given the difficulties in accessing a representative sample of FSWs because of the unknown size and boundaries of this population, initial mapping of working areas with 60 FSWs helped identify sex work strolls, which were then used for targeted outreach and recruitment.
Design and methods	Time–space sampling was used to systematically sample all women (inclusive of transgender women) working at staggered times and locations along these strolls (response rate of 94%). Participants received compensation worth Can $25 at baseline and each follow-up visit.
Sample description	A total of 255 women completed a baseline survey (response rate of 94%) and one follow-up visit and were included in this analyses, with 601 observations available over four visits (median visits = 2, interquartile range [IQR]: 1–3). Approximately, half (47%, n = 121) of the participants to an aboriginal ancestry. First nations, Metis, Inuit or non-status First Nations. The median age at baseline was 36 years (IQR: 25–41) and the median age of sex work initiation was 15 years (IQR: 13–21). Overall, HIV prevalence at baseline was 23%. Consistent with the United Nations definition of youth ($\leq$24 years), 22% (n = 56) of the population studied were youth (ages: 18–24 years) and 78% (n = 199) were aged $\geq$25 years.
Key findings (relevant to the project)	-It was found evidence of the increased dislocation of young street-based FSWs to isolated and outdoor housing and work environments. -Youth were more likely to be dependent on heroin, but significantly less likely to access addiction treatment for opiates as compared with their older counterparts. -The article highlights the social and structural dislocation among some of the world's most vulnerable young women without access to treatment and social support services. - 69% of young FSWs reported "absolute homelessness".

	- Accessible and supportive social housing strategies for female youth are lacking. - Homeless youth have higher rates of infectious diseases, such as hepatitis B, HCV, and HIV, as well as increased risk for pregnancy and violence. - As compared with youth who have stable housing, those who are homeless report higher rates of injection and noninjection drug use. -To to live in marginalized public spaces, young FSWs were significantly more likely to service clients in public spaces, such as alleys, parkades, industrial settings, and cars, as compared with indoor settings (such as saunas, hourly hotels). - The continued legal barriers to client–sex worker date negotiation in public spaces and working in safer indoor spaces seem to have a disproportionately adverse effect on vulnerable youth, thus pushing them outside of the public health and social support umbrella. - Youth in this study population were significantly more likely to be dependent on injection heroin, but significantly less likely to access MMT. - The increased likelihood of freqüent heroin injection among the youth in this study was most likely fueled by the more precarious state of the housing condition of young women and limited access to methadone. - More than half of the young FSWs were of aboriginal ancestry.
Implications of findings/ conclusions	- Developing youth and gender-specific supportive housing models may be a critical structural intervention toward engaging young FSWs in social supports, treatment, and health care. - The interrelationships between youth engaged in survival sex work and marginalized work in public spaces indicate the multi-layered structural barriers for young FSWs. - There is a critical need for socio-legal policy reforms that remove criminal sanctions targeting sex workers and develop supportive housing and work spaces that facilitate female youth's control over sexual exchange and also help engage them in public health. - Subsequent research needs to consider how exposure to vulnerable work and living environments shape transitions from noninjection to injection drugs and influence access to health care services including treatment. - The need for tailored and innovative interventions to support young women's safety, such as low-threshold housing, methadone, and 24-hour safe spaces, will help empower youth to break the trauma cycle and afford alternative opportunities to reduce reliance on risky drugs and sexual relationships for survival. - Younger age most likely adds to complications in accessing MMT services because of provider concerns over methadone prescription to youth and the absence of specialized service providers for patients aged <19 years. - Further evidence is required to elucidate effective and appropriate models of MMT, other drug treatment strategies, and low-threshold housing and safe spaces

	to support the health of young women who are socially marginalized. - The need to hire and involve Young FSWs to develop "rights-based" interventions to reduce the social and structural barriers that create, reinforce, and reproduce risk in this vulnerable population has been underscored - Resources must be directed toward aboriginal communities and health authorities should implement aboriginal-centered prevention, treatment, healing, and housing services in urban and rural settings specifically designed with and for young aboriginal women involved in street-based survival sex work - This research provides evidence of the multiple estructural barriers facing female youth who engage in survival sex work on the streets of cities in Canada. - The findings support growing evidence of the critical need to remove legal barriers and to meaningfully engage young FSWs in health and support services - Structural interventions need to be tailored to serve the ones who are most vulnerable, and should include supportive housing models and safer indoor work spaces that meet the requirements of the youth "where they are at" and provide a continuum of holistic and culturally competent services from harm reduction to drug treatment and health care services.
Limitations of research	- The observational nature of this research and the use of self-reported data should be interpreted with caution - The sample did not comprise young people aged $\leq$17 years - The data reflected here may not represent very young populations of women involved in survival sex work. - The use of self-reported measures, such as violence, rape, childhood sexual and physical abuse, could subject the data to response bias
Relevance to review aims	Partly. Focus is not on recovery but some service considerations/needs are discussed.

Record	33
Author/s	Moore, D.
Title	'Workers', 'clients' and the struggle over needs: Understanding encounters between service providers and injecting drug users in an Australian city
Journal and page numbers	Social Science & Medicine 68, 1161–1168
Year of publication	2009
Country where research took place	Melbourne, Australia
Recruitment site	The research focused on the social contexts of heroin overdose and service provision. St Kilda, a bayside suburb located approximately 6 k south of central Melbourne. Total street sample (n=42). Interviewees received AUS$20 for their time and out-of-pocket expenses.
Design and methods	Ethnographic research with street-based injecting drug users and service providers in St Kilda from August 2000 to June 2002, with follow-up research undertaken in September and December 2002 and May and August 2003
Sample description	Street-based injectors are much more likely to be involved in illegal street sex work (either as a sex worker or partner of a sex worker), to be unemployed, to be homeless or insecurely housed, and to have lower levels of education. Most are Anglo-Australian heroin users with experience of drug treatment and the legal system. The majority believe that they are infected with hepatitis C, more than one-third reports sharing injecting equipment in the last year, all but two report polydrug use, and more than two-thirds report experiencing a drug overdose. Those who do not live in St Kilda (roughly one in two) are drawn there by the economic imperatives of heroin dependence and participation in an underground economy that includes street sex work and drug dealing.
Key findings (relevant to the project)	<u>Neo-liberalism and Australian public policy.</u> -Services underwent profound changes as a result of neo-liberal government policies introduced in the 1990s. These included a move to a market model which saw government as a purchaser rather than provider of services; the introduction of widespread competitive tendering for service funding; an emphasis on productivity, outputs, goals and targets; and restructuring of agencies and community services to make them 'more autonomous and accountable, oriented to cost-cutting efficiencies, technical rationality and values of competitiveness -Many of St Kilda's social, health and drug services had experienced the 1990s neo-liberal reforms. These had generated a structural tension whereby agencies delivering services to marginalized populations were often competitors for funding. <u>Subjects and environment in service discourse</u>

	-In-depth interviews and fieldwork revealed that the field is conceptualized as consisting of professional 'workers' and the 'clients' of service provision. Workers are invested with considerable authority by the state through 'mandatory reporting' (i.e., the legal requirement to report cases of child physical or sexual abuse or neglect) and 'duty of care' regulations (e.g., to provide a reasonable standard of care whilst undertaking acts that could potentially harm others). -In addition to professional knowledge and skills, 'good workers' need 'empathy', a 'non-judgmental attitude', 'good social skills' and to be 'client-centered'. -Services also conduct 'needs assessments' in order to redesign existing programs to better meet the perceived requirements of clients, plan new programs or support funding applications. -Tensions were reported between neo-liberal and critical readings of clients and service delivery 1st. cultural construction of 'clients', who are defined in agency policy documents as 'drug dependent', 'vulnerable', 'marginalized', 'hard-to-reach', having 'complex needs' or 'at-risk *The decontextualisation of drug use individualizes 'drug problems' and ignores the well-established relationship between political economy and drug-related harm * Clients can be described as chaotic references to 'chaotic' drug users and lifestyles in public discourse on drugs are poorly defined, and uncritically promote neo-liberal norms 2nd. The second tension between neo-liberal and critical readings of clients and service delivery relates to the slippage between service philosophies that emphasize a social model of health and forms of service delivery that emphasize the production of responsibilised subjects. <u>Street-based survivalists</u> <u>-</u>A primary need is the ability to finance daily heroin injecting, with street sex work being a main source of income. -Street sex workers are regularly physically and sexually assaulted, robbed and, on occasions, murdered. -There is also the high probability of arrest and sexually transmitted infection -Typical topics of conversation documented during ethnographic fieldwork included: _ the price, quality and size of heroin deals; _ the availability, ethics and business practices of dealers, particularly with regard to giving 'credit'; _ recent trends in sex work, including assaults, descriptions of aggressive mugs and

	the actions of hostile (as well as supportive) residents; _ activities relating to income generation or 'rorts'; _ police activities; _ recent dealings with service providers; and _ the (mis)fortunes of other street participants. 'Responsible users' dispose of used injecting equipment with appropriate regard for other members of the community, whereas 'junkies' allegedly show no such altruism. -Service-provider representations of drug users that emphasize disorder, drug users re-assert their possession of attributes such as rationality, autonomy and independence, and articulate a set of needs around income generation, access to heroin, respect, safety and the knowledge relevant to participation in the street drug economy. <u>Resistance, strategic accommodation and incorporation</u> *Resistance:* Resistance takes the form of 'everyday tactics' such as verbal abuse, avoidance, false compliance, feigned ignorance and lying. In St Kilda, some drug users refuse to engage with service providers. They avoid contact with services altogether, enter into brief encounters in order to obtain injecting equipment or condoms, refuse to conduct themselves in 'appropriate' ways -They frequently articulate a desire to be treated respectfully and display acute sensitivity to perceived slights from service providers, which can result in verbal abuse and abrupt disengagement from the encounter -Female service providers, in particular, frequently remarked on their discomfort when dealing with 'the blokes' particularly if they had been using the stimulant methamphetamine rather than heroin. Service providers saw their 'need' to engage with female clients as being obstructed by male street practices. *Strategic accomodation* -They struggled to remember what information they had provided to which service provider, in order to ensure a coherent form of strategic self presentation in their dealings with them. -They always dispose of their used 'fits' (needles and syringes) safely – by returning them to NSPs or by disposing of them in specially designed steel bins placed in various public locations -Another example of strategic accommodation is provided by the

	sometimes abrupt switches in the linguistic codes of street-based injectors when they contact services – shifts from street slang and demeanour to more polite and courteous modes of communication (e.g., apologising to service providers after swearing). *Incoporation(*the adoption of service-provider discourse by survivalists.) -Survivalists appear to be producing themselves and their practices through elements of serviceprovider discourse – X as needing to control her impulses through self-management; Y in identifying himself as a risktaker. -They read education pamphlets, they talk to other drug users involved with service providers, they interact with different types of workers. They become familiar with narratives of self-knowledge and self-care and may come to understand themselves, at least partially and inconsistently, as 'deep selves to be unravelled therapeutically'
Implications of findings/ conclusions	-This paper focuses on the power relations and discourses operating in encounters between service providers and their drug-using clients. -The needs interpretation of service providers includes tensions around the definition of injecting drug users as chaotic (i.e., failed) subjects and slippage between service philosophies that emphasize a social model of health and forms of service delivery that emphasize a responsibilised subject. -Injecting drug users practice a survivalist cultural form that emphasizes self-reliance, autonomy and independence, attributes and capacities denied them in service-provider discourse. Their responses to disciplinary power are varied and include, in addition to everyday acts of resistance, elements of strategic accommodation and the inconsistent and partial incorporation of therapeutic discourse. -Service providers and drug users take up neo-liberal values in constructing their discourses, but deploy them to promote different interests -The initial training and ongoing professional development of service providers should emphasize, as a matter of priority, an understanding of the politics and ethics of service provision.
Limitations of research	Not reported
Relevance to review aims	Partly. Focus is not on recovery. Service needs/access discussed

Record	34
Author/s	Lyn Stankiewicz Murphy
Title	Understanding the Social and Economic Contexts Surrounding Women Engaged In Street-Level Prostitution
Journal and page numbers	Issues in Mental Health Nursing, 31:775–784
Year of publication	2010
Country where research took place	United States of America (Maryland)
Recruitment site	A purposeful sample of 12 women was recruited from an intervention program that provides treatment and counselling for women who are currently engaged in street-level prostitution. An introductory letter describing the study was provided to all potential participants prior to obtaining verbal informed consent. All of the interviews were conducted in a private room as part of the intervention program. This setting was selected by the participants. Participants were given a gift bag with personal items (soap, deodorant, socks) and $20 at the completion of each interview.
Design and methods	Thus, the purpose of this study was to understand what factors contribute to a woman's decision to remain in prostitution. A series of interviews were conducted with 12 women engaged in street-level prostitution
Sample description	12 women were involved in an intervention program designed to help women who were engaged in street prostitution. Mean age of 40 years (23 to 56). Eight women were Caucasian, three women were African Americans, and one was Filipino. Five women were divorced, four stated that they were single, two indicated that they were widows, and one was married. The majority of the women (*n* = 7) had completed some high school. The majority of the women (*n* = 10) were unemployed. All of the women indicated that they do not consider prostitution to be a form of employment or occupation. The majority (*n* =6) indicated that they were living with friends or relatives. All of the women, except one, had children. All of the women were currently involved in street-level prostitution. First involvement in prostitution-related activities (mean = 19 years). All of the women (*n* = 12) reported that they had been addicted to drugs. Ten of the 12 women indicated that they currently used drugs, with heroin being the drug of choice. Length of drug use largely correlated with incidence of prostitution. On average, the women had been prostituting for 13.7 years (range of 2–22 years). Nine of the women disclosed physical and/or sexual childhood abuse. Three of the women disclosed that they took advantage of mental health therapy at some point in their lives as a result of the abuse. All of the women described the neighborhood in which they lived as high crime, high violence, high drug use, and economically poor.
Key findings (relevant to the project)	<u>The social network of prostitution</u> -In general, street-level prostitution is largely a solo activity -Social support among the women also linked into their drug behaviour.

	-These women lack the traditional forms of social support, in terms of family and community, that they then turn to one another for support and encouragement. -Social network may actually guide and influence a woman's decision-making ability towards a negative outcome -It may be difficult for a woman to disengage from drug use and prostitution given that their social network is such a strong component of their personal lives. <u>The economic stability of prostitution</u> -Most women involved in street-level prostitution have a regular clientele, which is operationally defined as a "longterm relationship with specific clients" -The act of prostitution provides the woman with some form of economic stability that she otherwise may not have. -This is not to minimize the dangers of prostitution, such as violence and the overall health hazards of prostitution. <u>The economic advantage of prostitution</u> -Thus, regardless of the reason that women prostitute, it generates a necessary income for them, which may provide them with an economic advantage to remain in prostitution. -The cost of service is being reduced because the supply of women engaging in street-level prostitution is increasing and these women are bartering themselves at a lesser cost in order to receive the much needed drug money. -These women are part of a community that does not provide opportunities or alternatives for the women to disengage from drug use or prostitution -Women need to re-establish themselves in a community where addiction and prostitution are not part of the culture.
Implications of findings/ conclusions	-Women engage in prostitution as a result of economic necessity or an existing drug habit. -Women largely remain in prostitution in order to sustain their existing drug habit. -This relationship of prostitution and drugs is further compounded by the fact that many of the women will continue to use or increase use of drugs in order to lessen or detach themselves from the psychological effect of prostitution. -It is hypothesized that remaining in prostitution becomes a vicious cycle of drug use to decrease the "pain" of prostitution and the actual behavior of prostitution in order to sustain the drug habit. -Other factors that may contribute to a woman's tenure in prostitution. Can be: *Prostitution as a social network. Despite the fact that the social network itself perpetuates negative outcomes, the women engage with one another and may fear the loss of the only social support that they may have; thus, they continue their tenure in prostitution.

	*Social network may hinder the women's disengagement from prostitution. -Prostitution offer the women a regular source of income. The majority of the women have a regular clientele and the clientele enjoy a regular "date." -A mutual economic exchange is created between "buyer" and "seller." -Women can establish some form of financial security and obtain the commodities they need or desire. -It is important to study effective, comprehensive, community-based models of intervention that try to interrupt the cycle and prevent prostitution cannot be formulated. *risk factors, strategies to avoid prostitution, protective factors -It is difficult to isolate any one factor that solely contributes to a woman remaining in prostitution.
Limitations of research	-Only women in one East Coast city were interviewed, thus, the results of the study may not be generalizable to all women engaged in street-level prostitution. -The participants of the study are women who self-selected to engage in some type of intervention, and may be different from the women who have not engaged in some type of intervention program. -The intervention program may serve to bias the women's view of their experiences in prostitution. -The number of interviews vary among the women that participated in this study. -10 of the 12 women that were part of the sample indicated that they were active drug users. It may be that that the drug use interfered with the interview process or with the validity of the results.
Relevance to review aims	Partly. Recovery not focus of paper.

Record	35
Author/s	Minh-Nguyet Nguyen, Thérèse Venne, Isabel Rodrigues & Julie Jacques
Title	Why and According to What Consultation Profiles Do Female Sex Workers Consult Health Care Professionals? A Study Conducted in Laval, Québec
Journal and page numbers	Health Care for Women International 29:2, 165-182
Year of publication	2008
Country where research took place	Laval, Québec
Recruitment site	Recruited from a variety of milieus such as bars, private agencies or escort services, the home, massage parlors, and hotels or motels
Sample description	Female sex workers. Participants for interviews were recruited through a community center where they received STI preventive cares and services. No detail on the 216 sex workers were selected for participation in the study. No inclusion/exclusion criteria presented.
Design and methods	Data were collected from female sex workers by means of questionnaires, focus groups, and in-depth individual interviews *Questionnaires*: (piloted) "structured questionnaire during oneon-one sessions between June and July 2003, according to a cross-sectional design and among an opportunistic sample of 201 female sex workers" The variables measured were those used in the Sante Quebec survey (1998) and by Serre et al. (1996) in their research: (1) sociodemographic variables; (2) variables related to living conditions and lifestyle habits; (3) occupational practice profile; (4) use of condoms at work and in private life; and (5) frequency of and reasons for recourse to healthcare and health services during the 12 preceding months. ***Only data on the frequency of and reasons for recourse to health care and health services are presented in this article***. *Focus Group:* December 2003, ***1 focus*** group of ***six selected female sex workers***. The data collected were intended to ascertain the following: (1) the participants' knowledge of the health care network and their experience of it; (2) their perception of the network's accessibility; (3) factors that affect the consultation of health professionals; and (4) unfulfilled health needs. *Interviews*: ***semi structured interviews*** between February and April 2004 among ***12 female sex workers***. The interviews lasted from 45 to 90 minutes and allowed us to examine in greater depth the themes already broached by the focus group. We used the critical incident theory to encourage the participants to talk about their most recent significant experience with the health care and health services system
Analysis	*Questionnaire*: "The data have been captured and analyzed using SPSS 12.0 software (SPSS/PC+, 2004) and are descriptive" (p167) *Focus Group*: "***Thematic content analyses*** centered on the prioritization of themes and sub-themes were conducted, and points of divergence and convergence then were identified. The findings made it possible to clarify the outline of the individual interviews." (pg 168) *Interview:* "signed consent of the participants before recording the interviews. Verbatim interviews were transcribed to ensure the data's integrity. We ***read the***

	transcripts three times to obtain an overview of the material, discern its general meaning, and guide subsequent analyses. The categories and subcategories subsequently were coded according to units of meaning. At least ***two people conducted the analyses*** with respect to inter-rater agreement. (**thematic analysis**)
Key findings (relevant to the project)	**Response rate 201/216** **Questionnaires completed n= 201, Interviews n= 12, focus group n=6** From questionnaire, why the consulted health services: "**the most frequent being drug addiction** and gynecological, respiratory, psychosocial, and digestive problems" (pg 170) **From Table 2 (pg 171)** Data drawn from the questionnaire (*n* = 201): *Q. Health services used during the preceding 12 months* Medical clinic 52.7% CLSC (local community service center) 50.7% Hospital emergency service 26.4% Specialized clinic 9.0% **Drug treatment center 6.5%** *Q. Reasons for consulting health professionals during the preceding 12 months* Physical, musculoskeletal, and respiratory problems 37.8% STI (incuding HIV/AIDS) and gynecological problems 25.9% Mental health problems, stress 23.4% **Drug- and alcohol-related problems 11.4%** Data drawn from interview *n= 12* **Consultations related to drug addiction** **(insomnia stemming from drug abuse, disintoxication and therapies) *n* = 8** **Therefore 8/12 in the interview discussed drug addiction and consulted health care professional because of this**. **6.5% of the 201 Questionnaire participants used a drug treatment centre in the past 12 months, and 11.4% consulted health professionals because of drug/alcohol related problems.** "***all of the respondents indicated that they knew how to obtain the necessary health care and health services***" (pg 170) "One respondent found it regrettable that she had to go to a neighbouring city to receive methadone substitution treatment because she was unaware that the service was offered locally in a public rehabilitation centre." (pg 172) "All of the respondents indicated, however, that the **hours and days of operation of most health services made it hard for sex workers to gain access** to them since they did not suit the women's work schedules. Several of them mentioned having faced unbearably long waiting periods in hospital emergency services and having left after several hours without obtaining care. Certain respondents mentioned that mental health services were not readily accessible, or they deplored long waiting lists to consult a psychologist. Others noted problems encountered with telephone systems when attempting to gain access to services." (pg 173) **However all liked online system**s **and information**
Implications of findings/ conclusions for treatment and research	"Roughly half of the respondents who consult their family physician do not disclose their occupation" – therefore targeted support could not be identified. "**clinics to develop partnerships with family physicians** trained to treat these

	patients who are marginalized by their occupation. This partnership should be supported by specialized mental health and drug addiction services, including needle exchanges and methadone substitution treatments" (pg 180)
Limitations of research	"in-depth individual interviews were recruited through a community center where they received STI preventive cares and services" (pg177) (limited the reach & finding of the interviews)
Relevance to review aims	Partly. Focus on sexual health not recovery, however, some relevant information on access

Record	36
Author/s	Larry A. Nuttbrock, Andrew Rosenblum, Stephen Magura, Cherie Villano, Joyce Wallace
Title	Linking female sex workers with substance abuse treatment
Journal and page numbers	Journal of Substance Abuse Treatment 27 (2004) 233– 239
Year of publication	2004
Country where research took place	New York City, US
Recruitment site	Recruited from areas where The Off-The-Streets Mobile Unit (OTSMU) delivers services in New York City at various sites where sex workers congregate and drug activity is common. All areas were characterized by low socioeconomic status and racial/ethnic diversity, including East Harlem in Manhattan, Hunts Point in the Bronx, and Coney Island in Brooklyn.
Sample description	Sex workers (N = 179) approaching an existing outreach facility were randomly assigned to receive usually provided services, or to receive an enhanced version of these services. 179 sex workers who presented for FROST'DTs outreach services between January of 2000 and March of 2002. Inclusion criteria were female gender, age (18 or older), self-identification as a sex worker, and a willingness to participate in a longitudinal research study involving random assignment to study groups. Intoxicated clients, or those who were currently enrolled in substance abuse treatment, were excluded. The Institutional Review Board of NDRI approved the research protocols.
Design and methods	Randomly assigned to continue receiving FROST'D services, or to receive an enhanced version of these services (n = 96, 83 respectively) A total of 144 clients (81%) were successfully followed, and re- interviewed after 6 months or longer; 76 had been assigned to the control group and 68 had been assigned to the experimental group. Despite random assignment, the study groups were statistically different with regard to ethnicity. There were no other baseline differences between the two groups. **Hypotheses** *Intervention Effect*: The above enhancements were hypothesized to result in a greater number of clients placed in substance abuse treatment in the enhanced (treatment linkage) as compared to the existing (FROST'D) street outreach modalities. *Client Effects*: Reflecting previous literature (Arnold et al., 2000; Galanter & Kleber, 1999), living arrangements, degree of involvement in the sex trade, involvement in the criminal justice system, motivation for substance abuse treatment, lifetime substance use, and severity of substance dependence were hypothesized to be associated with accepting substance abuse treatment. **Measures:** Motivation for Substance Abuse Treatment: The Drug Abuse Treatment Awareness and Readiness Scale (DATAR), Substance Use and Severity of Dependence: The lifetime and prior-month histories of using alcohol (four or more drinks/day) and specific classes of other drugs. The recent use of cocaine and opiates was also assessed biologically using radio immunoassays of hair. A hair sample of about 50 strands, 1.3 cm in length (1 month of typical growth), measured from the root end, was obtained to test for intake of

	cocaine and opiates during the prior 30 days. Following laboratory protocols (Psychemedics Corporation, Culver City, CA), 5 or more nanograms of cocaine and 2 or more nanograms of opiate metabolites per 10 mg of hair were coded as positive Substance Abuse Treatment: At baseline, life-time history of substance abuse treatment is coded (yes or no), including: a prior detoxification from alcohol or other drugs; prior enrollment in a methadone maintenance program; and prior enrollment in any other type of treatment or intervention (12-step program; 21- or 28-day rehab; outpatient counseling; therapeutic community or TC; or any other type of treatment). For followup data an identical coding scheme is used but is restricted to substance abuse treatment in the past 6 months The participants were paid $40 for completing a baseline and followup interviews (with additional compensation for intermediate interviews and HIV testing
Analysis	Logistic regression analysis is used to examine the effects of client characteristics and type of outreach (FROST'D outreach/counseling vs. Enhanced counseling) on three types of substance abuse treatment during 6 months of followup. The analysis was conducted using Version 6.1 of SPSS.
Key findings (relevant to the project)	Existing modality (control intervention): FROSTTD has been conducting outreach with female sex workers for more than two decades. The Off-The-Streets Mobile Unit (OTSMU) delivers services in New York City at various sites where sex workers congregate and drug activity is common. The OTSMU, staffed by a driver, an intern, and senior and intraining counselors, provides amenities (bathroom facilities; a bag lunch; and a warm and friendly environment), HIV prevention (condoms and literature), brief on-site counseling, and with the assistance of an office-based social worker, agency referrals for medical, psychiatric, and substance abuse treatment. Referrals for substance abuse treatment require detailed knowledge of the complex and changing requirements for admissions to these facilities, and are made in the context of the network of services provided in the New York Metropolitan Area. A review of FROST'D records indicated that contacts with the OTSMU van average about 475 per month (contacts can include repeated visits by the same client). The enhanced modality (experimental group): experimental intervention entailed an additional mobile unit, the Treatment Linkage Van, which operated in tandem with the OTSMU van, and featured three program enhancements designed to increase the number of successful referrals to substance abuse treatment: (1) a weekly scheduling of counseling for a minimum of 6 weeks (not required by FROST'D); (2) on-site substance abuse counselling conducted by an experienced treatment specialist (rather than a counselor in collaboration with an office-based social worker) and (3) direct access to an array of programs designed specifically for women, including substance abuse treatment. Of the 144 women about one fifth (19.7%) strongly agreed that they could be sent to prison if they were not in substance abuse treatment. This reflects the legal practice, in New York City Most of the successfully followed female sex workers had previously been in detoxification (65.3%), or some form of conventional treatment, including 21- or 28-day rehab, outpatient counseling, or a 12-step program (66.2%).one third (30.6%) of the lifetime heroin users had been in methadone maintenance previously. In conjunction with street-based outreach, a large proportion of these women had enrolled in some type of treatment modality during a 6-month period of time. Given the on-going debate about detoxification as a form of substance abuse treatment (Amato, Davoli, Ferri, & Ali, 2002), and the use of Medicaid to pay for it (Lehman & Danziger, 2003), the placement of about one third of these women in a detoxification program during the course of the study may not be seen as a highly successful outcome.

	Contrary to expectation, an enhancement of the streetbased outreach provided by FROST'D did not result in an additional number of these women being placed in substance abuse treatment. This may reflect the fact that: (1) this basic model of street outreach provided by FROST'D is highly effective (and difficult to improve upon); (2) that treatments are readily accessible in New York City; or (3) that the particular enhancements to this outreach (a minimum level of substance abuse counseling and on-site counseling from a substance abuse treatment specialist) are not significant components of street-based outreach. The existence of a basic model of street outreach, as exemplified by FROST'D, not the intensity of this outreach (as operationalized in this study), would appear to be critical. Previously detoxified respondents were more than twice as likely to be detoxified during the course of the study (odds ratio = 2.53). Previous history of detoxification and the experience of psychological substance dependence, rather than a broadly defined motivation for substance abuse treatment (measured by the DATAR), appear to be the key predictors for detoxification.
Implications of findings/ conclusions for treatment and research	High number relapsing and going back into treatment time and time again over the life course The degree of involvement in the sex trade was a highly significant negative predictor of other types of substance abuse treatment during the course of the study. Being highly enmeshed in the sex work life style, as suggested by Arnold et al. (2000), is indeed a barrier to certain types of substance abuse treatment in this population **Shows two (similar) ways of engaging with and enticing women to take up treatment – though does not discuss what is best practice, or what the treatment programme entails.**
Limitations of research	No control group that did not go through an intervention programme
Relevance to review aims	Yes although focus not on recovery, treatment models considered.

Record	37
Author/s	Cathy J. Reback, Steven Shoptaw & Martin J. Downing
Title	Prevention case management improves socioeconomic standing and reduces symptoms of psychological and emotional distress among transgender women.
Journal and page numbers	AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV, 24:9, 1136-1144
Year of publication	2012
Country where research took place	
Recruitment site	
Sample description	
Design and methods	
Analysis	
Key findings (relevant to the project)	
Implications of findings/ conclusions for treatment and research	
Limitations of research	
Relevant to review aims	No. There is no mention of prostitution/ sex worker within this study therefore not relevant.

Record	38
Author/s	Michael L Rekart
Title	Sex-work harm reduction
Journal and page numbers	Lancet 2005; 366: 2123–34
Year of publication	2005
Country where research took place	n/a
Recruitment site	Search engines & databases
Sample description	n/a
Design and methods	**Literature review. Search strategy and selection criteria** "For peer-reviewed publications, I searched MEDLINE (from 1966) and EMBASE (from 1980) using the MeSH terms "prostitution" and "risk reduction". UN, UNAIDS, and WHO publications were searched online with "sex work", "sex worker", "sex trade", "prostitution", "prostitute", "survival sex", "transactional sex", "harm reduction", "risk reduction", "trafficking", "decriminalization", and "human rights". The same terms were used to search psychological, social sciences, and social work publications (from 2000) from PsychInfo, Social Work Abstracts, Social Science Abstracts, and the Web of Science. EMBASE, MEDLINE, and a comprehensive social scientific and psychological review on sex work (1990–2000) were also used. Reference lists from selected articles and widely used textbooks on sexually transmitted disease were also reviewed. With the same key words I searched non-peer-reviewed work using an online search engine (Google), abstracts from International AIDS Conferences (1996–2004); UN, UNAIDS, and WHO websites and publications; and information from non-governmental organisations" "The Journal Citation Reports database was used to select high-impact journals. Non-peer-reviewed work was searched for additional issues." (Pg 2123)
Analysis	"Peer-reviewed work and UN publications were reviewed to establish overall themes. **All harms and harm-reduction strategies were listed and grouped under general headings**. Selected articles best represented specific themes according to the following hierarchy: analytical studies, descriptive studies, UN publications, and commentaries or editorials. Randomised, controlled, or large studies were preferred. "
Key findings (relevant to the project)	Aim: This Review of literature aims to (1) examine studies of sex work, by concentrating on peer-reviewed publications, and classify harms and harm-reduction strategies into overall themes; and (2) focus on simple, available strategies to improve sex workers' lives. **Estimated yearly occurrence:** **Adverse health effects in prostituted children* Substance abuse - All substances 9 000 000 –** (not sure where this is taken from, see pg 2124 blue table)

Initiative		Harms reduced
Education	Peer education, outreach programmes, accessible and appropriate materials, sex worker involvement	**Drug use**, disease, violence , debt, exploitation
Empowerment	Self-esteem, individual control, safe sex, solidarity, personal safety, negotiating skills, refusal to clients, service access, acceptance by society	**Drug use**, disease, violence, debt, discrimination, exploitation
Prevention	Male and female condoms, lubricant, vaccines behavioural change, voluntary HIV counselling and testing, participation in research	**Drug use**, disease
Care	Accessible, acceptable, high-quality, integrated care; prevention-care synergy; prophylaxis; STIs HIV/AIDS, and psychological care; social support	**Drug use**, disease, violence exploitation
Occupational Control	exposures and hazards, treatment for health and safety injuries and diseases, employer duties, worker rights	**Drug use**, disease, violence, debt, exploitation
*PREVENT=psychological counselling, reproductive health services, education, vaccinations, early detection, nutrition,treatment. ***Table 2:* Interventions for sex-work harm reduction (pg 2125)** **The only two areas that drug use is not reduced is *Rights-based approach* & *Decriminalisation of sex work*ers**		

Regarding interventions through education: Successful materials are simple, clear, consistent, non-judgmental, attractive, and culturally sensitive.16,71,95

Successful initiatives have resulted in enhanced selfesteem; improved negotiating skills; ability to refuse clients; access and use of condoms; training to recognise, avoid, and escape violence;

In ***Panel 4:*** **Australian health and safety guidelines for brothels and the sex work industry – under care and support it is suggested alcohol and drug treatment programmes should be provided.**

	Specifies Drug-use harm reduction programmes focuses on decriminalisation of drug users rather than the illicit drug industry. – however the above table does not show this has an effect of the reduction of drug use.
Implications of findings/ conclusions for treatment and research	Does not go into detail about different approaches or programmes of intervention for either drug harm reduction or any harm reduction therefore limited help to the DRUGSCOPE review. It does however specify 5 areas where substance use is reduced by the intervention (areas: education, care, prevention, occupational control and empowerment) yet does not provide any examples of these.
Limitations of research	No examples of interventions to base the merits on or impact shown on participants.
Relevance to review aims	Yes. However, Paper not drug specific, therefore all response (other than those specifically referred to drug services) are in relation to general/all harms incurred by sex workers, so may or may not be directly relevant to drug reduction in this population

Record	39
Author/s	Grace L. Reynolds, Dennis G. Fisher, Adi Jaffe and Jordan Edwards
Title	Follow-Up for Medical Care Among Drug Users With Hepatitis C
Journal and page numbers	Evaluation and the Health Profession, 2006 29: 355
Year of publication	2006
Country where research took place	California, USA
Recruitment site	A total of 817 current and former IDUs were recruited from drug treatment programs, methadone maintenance programs, needle exchange programs, and a community-based agency between October 2002 and December 2004. The purpose of the recruitment was to determine the prevalence of HIV and hepatitis A, B, and C in this population.
Sample description	All participants had to be at least 18 years of age and have visible signs of injection ("track marks") according to the classification system established by Cagle and colleagues (Cagle, Fisher, Senter, Thurmond, & Kastar 2002) for inclusion in the study. All participants who received testing for hepatitis A, B, and C, and HIV also received posttest counseling to explain their test results.
Design and methods	"The purpose of this study is to report on the effectiveness of providing referrals to medical care for out-of-treatment HCV-infected IDUs"
Analysis	
Key findings (relevant to the project)	Not relevant to study – medical model specifically addressing Hepatitis C - does not address prostitution/sex workers in any form or relation to drug use
Implications of findings/ conclusions for treatment and research	
Limitations of research	
Relevance to review aims	No. Paper does not address prostitution/sex workers.

Record	40
Author/s	Craig Rodgers
Title	The Kirketon Road Centre – improving access to primary care for marginalised populations
Journal and page numbers	Professional - reprinted from Australian Family Physician Vol. 41, No. 4, April 2012 245-247
Year of publication	2012
Country where research took place	Australia, New South Wales
Recruitment site	Review - The Kirketon Road Centre (KRC) in Kings Cross, Sydney (New South Wales),
Sample description	Not really described – review of the service
Design and methods	It is a description of the service at the centre and implications from GP's – this is for all service users (at risk YP, IDU's & Sex Workers)
Analysis	No information
Key findings (relevant to the project)	**Table 1. Clinical services at KRC** • Assessment and management of general health issues • HIV antibody testing/pre- and post-test discussion • HIV/AIDS medical management and counselling • Hepatitis A and B testing and vaccination • Hepatitis C testing, monitoring and treatment • Healthy liver clinic with specialised hepatitis service • Sexual health testing and management of STIs • Sex worker information and check-ups • Women's health checks, including Pap tests and breast examinations • Contraception, pregnancy testing and advice • Drug and alcohol counselling, assessment and referral • Crisis intervention/support and counselling for emotional issues • Housing, social security and welfare information and assistance • Podiatry clinic • Methadone access program incorporating case management • Needle and syringe program • Outreach program, street van and bus
Implications of findings/ conclusions for treatment and research	Arguably more important than any other issue is the need to have a **nonjudgemental** approach when dealing with vulnerable populations, **Resources on the paper which may wish to look at:** • Alcohol and Drug Information Service: http://yourroom.com.au/Helplines/alcoholdrug-information-service-adis-nsw.html • Drug and alcohol withdrawal clinical practice guidelines: www.health.nsw.gov.au/policies/gl/2008/GL2008_011.html • Opioid treatment program: clinical guidelines for methadone and buprenorphine treatment. www.health.nsw.gov.au/policies/gl/2006/GL2006_019.html

Limitations of research	Not research, service description
Relevance to review aims	Partly, however, does not address recovery.

Record	41
Author/s	AMANDA ROXBURGH, LOUISA DEGENHARDT, JAN COPELAND, & BRIONY LARANCE
Title	Drug Dependence and Associated Risks Among Female Street-Based Sex Workers in the Greater Sydney Area, Australia
Journal and page numbers	Substance Use & Misuse, 43:1202–1217
Year of publication	2008
Country where research took place	New South Wales, Australia & funded by the Australian Government Department of Health and Ageing.
Recruitment site	Areas of recruitment were locations in which street-based sex work was conducted
Sample description	Seventy-two women were recruited through various agencies that have ongoing contact with female street-based sex workers via the provision of onsite and outreach services. Inclusion criteria: <17 and had engaged in street-based sex work in the previous 3 months.
Design and methods	"Conducted by the National Drug and Alcohol Research Centre in consultation with the Sex Workers Outreach Project and collected cross-sectional data between April and August 2005 in Sydney, Australia, via a structured interview." "Recruitment cards with a contact number were distributed by these agencies to potential participants, who then called the first author to organize an interview time. All participants were provided with detailed information about the study prior to commencement of the interview and told that their participation was voluntary. Interviewers were trained in administering the interview, and all have psychology qualifications." "The questionnaire collected information on demographics, current working conditions in the sex industry, initiation into drug use, drug use patterns in the previous month, drug dependence, injection-related risk behavior, suicidal ideation, depression, trauma history, and PTSD. Dependence on various drugs (cocaine, heroin, and cannabis) was assessed using the Severity of Dependence Scale (SDS), a five-item 15-point scale that measures psychological dependence on various illicit drugs (Gossop et al., 1995a). The injecting subscale of the HIV Risk Taking Behaviour Scale was used to measure current injection related risk behavior (Darke, Hall, Wodak, Heather, and Ward, 1992)."
Analysis	Descriptive statistics were used to record the prevalence of drug use and drug dependence. Independent sample t tests were used for normally distributed data, whereas nonparametric tests were used for data that were skewed. Multiple logistic regression, with the backwards elimination method using log likelihood ratios,was employed to model associations between cocaine dependence and other variables at a multivariate level. All analyses were conducted using SPSS for windows, version 12.0 (SPSS Inc, 2003).

Key findings (relevant to the project)	**Table 1** Demographic characteristics Characteristic — % (N = 72) Mean age in years — 34 Mean years of school education — 9 Completed secondary education — 18 Aboriginal and/or Torres Strait Islander — 23 Prison history — 56 Currently homeless — 14 Homeless in past 12 months — 45 Source of income in past month (apart from sex work)* Wage or salary — 6 Government pension — 89 Criminal activity — 17 Child support — 6 Sex work as main source of income in past month — 93 Average number of years involved in the sex industry — 12 Left home before 16 years of age — 61 Ever sought treatment for drug use — 87 In drug treatment at time of interview — 61

Table 2
Drug use history, patterns of use, and drug dependence

Variable	% (N = 72)
First drug used	
Cannabis	33
Alcohol	29
Heroin	21
Methamphetamine powder (speed)	12
Benzodiazepines	3
Cocaine	2
Mean age in years of first drug use	15
Ever injected any drug	94
Mean age in years first injecting drug use	19
Injected before age 16	23
Past month injection	
Heroin	83
Daily heroin injection	43
Cocaine	42
Daily cocaine injection	13
Methamphetamines	40
Daily methamphetamine injection	4
Past month use	
Cannabis	63
Daily cannabis use	26
Alcohol	56
Daily alcohol use	6
Heroin dependent	82
Cocaine dependent	36
Cannabis dependent	32
Benzodiazepine dependent	26
Methamphetamine dependent	21
Alcohol dependent	13
Borrowed used needles in past month	7
Lent used needles in past month	22
Shared other injecting equipment in past month	32
Reporting drug use had increased since starting sex work	71

Table 3
Prevalence of depression, suicidal ideation and posttraumatic stress disorder

Variable	% (N = 72)
Reporting presence of depressive symptoms—mild to severe	87
Reporting presence of severe depressive symptoms	54
Consulted a health professional in the past 6 months	40
Depression as the main reason for consulting a health professional	79
Ever thought about suicide	74
Ever attempted suicide	42
Met criteria for lifetime diagnosis of PTSD	47
Met criteria for current PTSD (within past 12 months)	31
Consulted a health professional about PTSD symptoms	74

Implications of findings/ conclusions for treatment and	This study examined the patterns and correlates of injecting drug use and drug dependence among female street-based sex workers. It also investigated associations between cocaine dependence and; a) demographic characteristics, b) psychiatric comorbidity, c) injecting, and sex risk behaviors, and d) trauma history.

research	Has some statistical relevance regarding accessing treatment and substance use, but does not look at the treatment provided or discuss how this could be improved – very clinical study Age of first drug use is quite young, evidence suggesting that those initiating drug use at an earlier age are more likely to develop problematic substance use, engage in risky sexual behavior, become involved in criminal activity, and complete fewer years of education. Earlier initiates to substance use are also more likely to become dependent, use for a longer time, and have more drug-related problems **Treatment implications**: early intervention, in order to reduce the likelihood of young people developing problematic drug use. Barrier – stigma = concerns were voiced among the women in the current study, who worried about health professionals understanding them and their involvement in the sex industry. Health professionals need to be aware of these concerns, as well as the potential existence of child sexual abuse, as this may complicate engagement of these women. Although a large proportion of the women were engaged in drug treatment, many of them continued ”heavy” patterns of illicit drug use. Further research, identifying potential barriers to treatment for this group, is warranted in order to develop relevant programs that would encourage attendance and sustained engagement. The role of outreach workers also remains crucial in promoting and providing referral information on available drug treatment programs. Providing comprehensive drug treatment referrals as well as brief onsite counseling had a marked impact on treatment uptake and sustained retention (Nuttbrock, Rosenblum, Magura, Vilano, and Wallace, 2004). Likewise, Yahne, Miller, Irvin-Vitela, and Tonigan (2002) trialed a brief psychological intervention for female street-based sex workers utilizing motivational interviewing techniques and found that, after the intervention (delivered via outreach), the women reported large reductions in the frequency of their drug use. drug treatment programs need to address, depression, and suicide Psychiatric comorbidity has been associated with poorer drug treatment outcomes (Mills, Lynskey, Teesson, Ross, and Darke, 2005), **which highlights the need for integrated service provision among drug treatment and mental health agencies. Research on ways in which existing outreach services might be extended to provide strategies for these women in dealing with the risks they face at work is also warranted.**
Limitations of research	The findings of this study refer to street-based sex workers, who differ from sex workers employed in other sectors of the industry on several domains Inherent to any study of marginalized populations engaging in stigmatized activities is the issue of sample representativeness, which is difficult to achieve among these groups. Findings from the current study may be more indicative of those women who were willing to participate. One recruitment strategy utilized in an attempt to overcome this limitation was personal introductions to the women, facilitated by outreach workers who knew the women and their working locations well. Because of the recruitment method (contact cards for individual to call researcher) this may have limited the uptake, only those actively wishing to take part and physically able could access the research.
Relevance to review aims	Yes. Relevant for service uptake/access but recovery not discussed.

Record	42
Author/s	Amanda Roxburgh, Louisa Degenhardt and Courtney Breen
Title	Drug use and risk behaviours among injecting drug users: a comparison between sex workers and non-sex workers in Sydney, Australia
Journal and page numbers	Harm Reduction Journal, 2:7
Year of publication	2005
Country where research took place	New South Wales, Australia
Recruitment site	Participants were recruited through Needle and Syringe Programs (NSPs) in Sydney, NSW. NSP sites were chosen due to their proximity to street based illicit drug markets. Data are drawn from the Illicit Drug Reporting System (IDRS), in which sentinel groups of regular IDU are sampled annually.
Sample description	**Eligibility criteria** for entry into the study were: (i) at least monthly injection in the six months preceding the interview; and (ii) residence in Sydney for twelve months preceding the interview, with no significant periods of incarceration or residence in inpatient rehabilitation programs. IDU who reported current engagement in sex work for money and or drugs are classified as sex workers for the purpose of this paper.
Design and methods	Cross-sectional survey data collected in 2003 on a sentinel population of regular IDU regarding their drug use history, patterns of use, risk taking behaviours and drug-related harms. Data were from the NSW Illicit Drug Reporting System (IDRS). The IDRS is conducted annually in June using the same methodology, and provides sensitive data on trends and changes in drug use over time Participant information & consent was given. Interviews lasted 45 mins Participants received reimbursement of $30 for travelling expenses. No identifying data was collected at any time throughout the interview or recorded on the questionnaire. Responses were coded according to closed data fields on the interview schedule. IDU sampled for the IDRS are not intended to be representative of all IDU, Cross sectional data collected from regular IDU interviewed as part of the New South Wales (NSW) Illicit Drug Reporting System (IDRS) in 2003 were analysed.
Analysis	Differences in demographics and drug preference were analysed using chi square statistics. Differences in age of initiation into injecting drug use were analysed using the t-test statistic. Mann Whitney tests were employed to analyse differences in drug use patterns (i.e. median days of use in the preceding six months) and expenditure on drugs.
Key findings (relevant to the project)	AIM: The current study aims to examine whether regular injecting drug users who engage in sex work are at greater risk for adverse outcomes (such as homelessness and poor mental health), are more likely to engage in risky behaviours (needle sharing, criminal activity), and have different drug use patterns than injecting drug users who do not engage in sex work.
Implications of findings/ conclusions for treatment and research	The similarities between these groups were more striking than the differences. Further research, examining a larger sample is needed to clarify whether injecting drug users who are sex workers have heavier use patterns. – Suggests **Overall not really relevant – gives stats on the risk factors but does not go into barriers treatment or best practice.**

	Not relevant to the three research questions - about risk taking behaviours
Limitations of research	the current study should be interpreted as indicative of certain trends, given the relatively small number of sex workers sampled (22/ 154). Further research in Australia, examining issues raised in this study, needs to be conducted among larger groups of sex workers for more definitive results. Findings should also be interpreted within the context of street based sex workers, who differ from commercial sex workers in several domains
Relevance to review aims	No

Record	43
Author/s	Jennifer R. Schroeder T, David H. Epstein, Annie Umbricht, Kenzie L. Preston
Title	Changes in HIV risk behaviors among patients receiving combined pharmacological and behavioral interventions for heroin and cocaine dependence
Journal and page numbers	Addictive Behaviors, 31: 868–879
Year of publication	2006
Country where research took place	Baltimore, US
Recruitment site	The trial was conducted at the Archway Clinic, an outpatient research clinic of the National Institute on Drug Abuse Intramural Research Program in Baltimore, MD
Sample description	Participants in this study were those who completed a clinical trial evaluating the efficacy of cognitive-behavioral therapy (CBT) and contingency management (CM) for cocaine use in methadone maintained patients. Individuals were eligible for initial treatment enrollment if they were between 18 and 65, if they qualified for methadone maintenance according to Food and Drug Administration guidelines, and if self-report and urine screens indicated use of both cocaine and opiates. Individuals with current major psychiatric illness or unstable serious medical illness were excluded.
Design and methods	This study was a randomized controlled trial of behavioral interventions for cocaine dependence and HIV risk behaviors among dually (cocaine and heroin) dependent outpatients. Methadone maintenance was augmented with cognitive-behavioral therapy (CBT), contingency management (CM), both (CBT+CM), or neither. The study sample (n=81) was 52% female, 70% African American, and 37.9+/-7.0 years old. Applicants were first screened by telephone and then in two on-site visits that included medical,psychiatric, and drug-use histories, a physical examination, urine and blood screens, and a battery of assessment instruments that included the Addiction Severity Index (ASI; McLellan et al., 1985), National Institute on Mental Health Diagnostic Interview Schedule (DIS III-R; Robins, Helzer, Cottler, & Golding, 1989), Symptom Check List-90-Revised (SCL-90-R; Derogatis, 1977), and Shipley Institute of Living Scale (Zachary, 1986). **Intervention** Participants received methadone maintenance treatment that consisted of a standard dose of methadone (70–80 mg/day) plus weekly individual counseling throughout the 29-week study. Methadone HCl (Mallinckrodt, Inc., St. Louis, MO) was administered orally once daily in 35 ml cherry-flavored solution. Counselors completed a semistructured psychosocial assessment and master treatment plan for each participant that guided the focus of all counseling sessions, which were problem focused and included both supportive and motivational techniques. Reduction of substance use was the primary goal of individual counseling, but participants were also educated about how HIV is transmitted and encouraged to adopt behaviors to reduce their risk of contracting or spreading HIV. Following a 5-week baseline period, during which the standard treatment alone was given, Participants were randomized to one of four treatment groups: contingent vouchers plus weekly cognitive-behavioral therapy (CBT); contingent vouchers plus weekly group

	therapy that functioned as a control treatment for CBT; noncontingent vouchers plus CBT; and noncontingent vouchers plus weekly group control therapy. Participants were only eligible to be randomized to the study intervention if at least 3 of 15 urine specimens collected during the baseline period tested positive for morphine (heroin metabolite) and benzoylecgonine (BZE, cocaine metabolite) (not necessarily in the same specimen). The experimental treatment conditions were administered for 12 weeks, followed by a 12-week maintenance phase in which standard treatment alone was given. After the maintenance phase, participants completed a 10-week gradual withdrawal from methadone, during which they were encouraged to transfer to a permanent methadone maintenance program in the community. Participants who left the study early completed a 21-day methadone detoxification prior to discharge. Contingent vouchers were given when a participant provided a cocaine-negative urine specimen; they had monetary value and were exchangeable for goods and services (e.g., bus passes, clothes) consistent with a drug-free lifestyle. Contingent voucher values began at $2.50 and escalated as the number of consecutive cocaine-negative urine specimens increased; a participant could earn vouchers worth a maximum of $1155 for 12 weeks of cocaine-negative urine specimens. Noncontingent vouchers are a control treatment for contingent vouchers. They had monetary value comparable to that of contingent vouchers, but were given independently of urine toxicology results. The CBT included elements of relapse-prevention methods (Marlatt & Gordon, 1985), coping methods (Lazarus & Folkman, 1984), behavioral-reinforcement methods (Lewinsohn, Steinmetz, Antonuccio, & Teri, 1984), and methods of generalizing skills to the environment (Covi, Hess, Schroeder, & Preston, 2002). Using structured exercises, participants were taught skills in four main areas: increasing nondrug sources of reinforcement, developing adaptive emotional responses to drugspecific and general life stressors, developing adaptive behavioral responses to such stressors, and decreasing sexual and needle-related HIV risk behaviors. The HIV risk behavior component included hands-on demonstrations plus group practice of HIV risk reduction skills (putting a condom on a banana, cleaning syringes). The control therapy consisted of weekly group meetings in which participants were encouraged to share ideas and feelings and support each other; no structured exercises were used or coping skills taught. Groups were led by separate sets of counselors trained in the intervention; sessions **Measurements** HIV risk behaviors were assessed at the intake visit, which took place prior to methadone induction, and at the exit interview, which took place following the final methadone maintenance dose but prior to withdrawal from methadone (for completers) or just prior to discharge (for non-completers). Participants completed a questionnaire consisting of questions regarding the frequency of engaging in risky drug related and sexual behavior in the past week; this questionnaire was an internally developed modification of that used in the ALIVE study (Vlahov et al., 1991). Urine specimens were collected thrice weekly throughout the study under observation of trained laboratory technicians. Qualitative testing was conducted with an Enzyme Multiplied Immunoassay Technique (EMIT; Syva Corp., Palo Alto, California) system that gave qualitative results for cocaine (BZE), opiates (morphine), benzodiazepines (oxazepam), phencyclidine, barbiturates, and marijuana. Cutoff concentrations for positive specimens were 300 ng/ml for cocaine, opiates, and benzodiazepines, 25 ng/ml for PCP, and 50 ng/ml for marijuana.
Analysis	Participants in the four treatment groups were compared with respect to baseline characteristics (demographics, cocaine and heroin use, psychiatric comorbidity) using analyses of variance for continuous variables and chi square tests for dichotomous variables. Study completion in the four treatment groups was compared using chi square tests (proportions completing the behavioural intervention phase), and non-parametric survival analysis techniques (retention time). Since HIV risk behaviors were dichotomized, behavior change was operationalized as the number of participants who indicated engaging in the behavior pre-treatment but not post-treatment. Exact

	confidence intervals using the Blyth-Still-Casella method were generated for the proportions who self-reported cessation. Fisher's exact tests were used to assess whether frequency of reporting each behavior was associated with treatment group. Logistic regression was used to determine he effect of treatment group assignment on cessation of each of four risk behaviours. Dummy-variable coding was used in order to compare each behavioral intervention group to the control group. Cytel Studio software version 6 (Cytel Software Corp., Cambridge MA) was used to generate exact confidence intervals and binomial tests; all other analyses were performed using SAS version 9.0 (SAS Institute Inc., Cary, NC).
Key findings (relevant to the project)	Of the 193 clinical trial participants randomized to treatment, 81 provided HIV risk behavior data at both the intake and post-treatment exit interviews and were included in this study. Participants included in these analyses were 51.9% female, 70.4% African American, and were age 37.9F7.0 years Psychiatric comorbidity was not uncommon in this sample: 25.9% had a iifetime diagnosis of a non-substance psychiatric disorder. HIV seropositivity was relatively uncommon 6.5% of participants were HIV-positive (4 participants declined HIV testing). Over three quarters (76.5%) of participants completed the twelve-week behavioral intervention phase of the study. Treatment groups did not differ significantly in terms of demographics, psychiatric comorbidity, HIV status, declining HIV testing, or retention in the study (Table 1).

Table 1
Baseline characteristics of 81 participants of a randomized trial of behavioral interventions for cocaine dep
treatment group

	CBT+CM ($n=16$)	CBT only ($n=19$)	CM only ($n=22$)	Control ($n=24$)	Statistic, p
Female	56.3%	63.2%	45.5%	45.8%	$\chi^2_3=1.81$,
African American	62.5%	73.7%	72.7%	70.8%	$\chi^2_3=0.64$,
Age (years)[a]	38.3 ± 7.6	37.3 ± 8.4	39.1 ± 5.9	36.9 ± 6.5	$F_{3,77}=0.4$
Unmarried	87.5%	84.2%	90.9%	87.5%	Fisher's e
Unemployed	43.8%	42.1%	45.5%	58.3%	$\chi^2_3=1.46$,
No HS diploma	43.8%	26.3%	36.4%	37.5%	$\chi^2_3=1.22$,
Drug-negative urines (%)					
Cocaine	4.2 ± 6.8	13.3 ± 17.9	6.1 ± 12.7	6.9 ± 14.8	$F_{3,77}=1.5$
Opiates	27.9 ± 26.1	27.0 ± 29.9	37.3 ± 33.9	36.4 ± 33.5	$F_{3,77}=0.5$
Lifetime dx of non-substance psychiatric disorder (DIS 3R)	12.5%	21.1%	31.8%	33.3%	Fisher's e
SCL-90 GSI	49.6 ± 11.9	46.6 ± 9.8	45.5 ± 9.6	45.0 ± 11.3	$F_{3,74}=0.6$
HIV-positive ($n=77$)	0%	11.1%	10.0%	4.2%	Fisher's e
Declined testing	12.5%	5.3%	13.6%	8.3%	Fisher's e
Completed intervention	87.5%	63.2%	81.8%	75.0%	Fisher's e

[a] Mean ± SD.

Table 2
Numbers of participants, with proportions in parenthesis, reporting HIV risk behaviors at intake and exit, by trea

	CBT+CM ($n=16$)	CBT only ($n=19$)	CM only ($n=22$)	Control ($n=24$)	F te
Intake					
Injection drug use	15 (93.8%)	19 (100.0%)	22 (100.0%)	22 (91.7%)	p
Sharing needles	11 (68.8%)	14 (73.7%)	12 (54.6%)	9 (37.5%)	p
Unprotected sex	7 (43.8%)	6 (31.6%)	7 (31.8%)	5 (20.8%)	p
Trade sex for drugs or money	4 (25.0%)	4 (21.1%)	8 (36.4%)	7 (29.2%)	p
Exit					
Injection drug use	8 (50.0%)	13 (68.4%)	7 (31.8%)	11 (45.8%)	p
Sharing needles	2 (12.5%)	3 (15.8%)	2 (9.1%)	1 (4.2%)	p
Unprotected sex	3 (18.8%)	1 (5.3%)	1 (4.6%)	2 (8.3%)	p
Trade sex for drugs or money	1 (6.3%)	1 (5.3%)	1 (4.6%)	3 (12.5%)	p

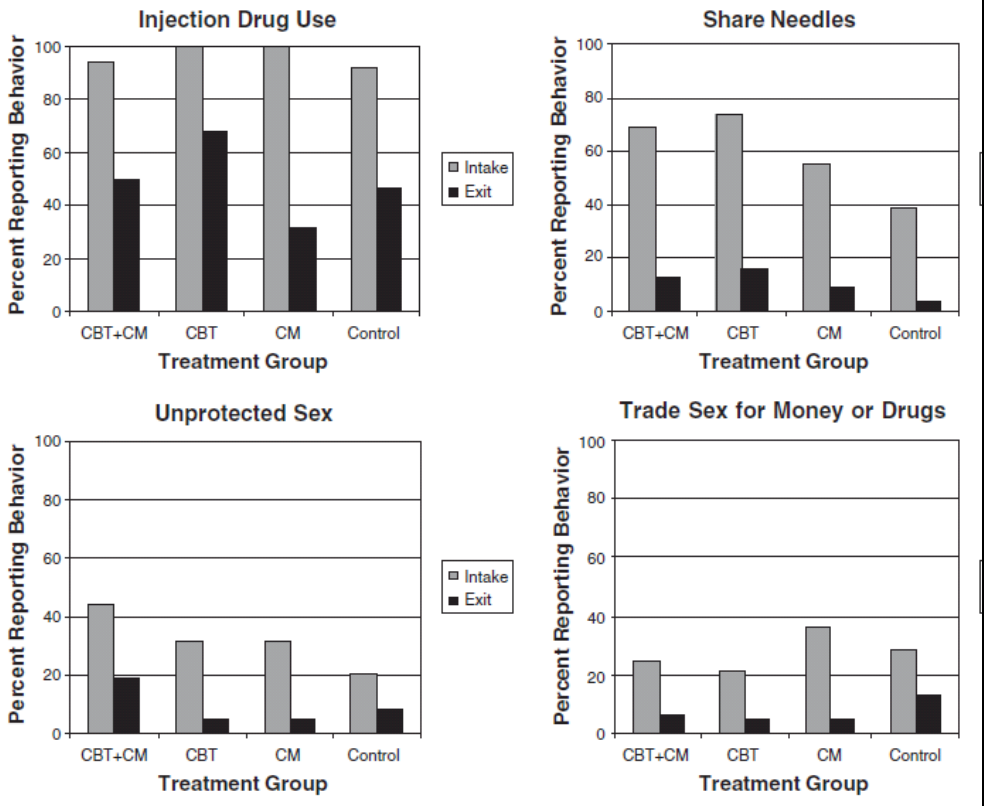


Table 3
Odds ratios with 95% confidence intervals for ceasing HIV risk behaviors in each treatment group compared to contro with and without adjusting for drug-negative urines

Treatment group	Stop injecting	Stop sharing needles	Stop unprotected sex	Stop trading sex for mone
CBT+CM				
Unadjusted	1.18 (0.33–4.20)	3.33 (0.89–12.49)*	5.44 (1.14–25.95)**	1.27 (0.28–5.68)
Adjusted	0.79 (0.18–3.41)	3.75 (0.95–14.82)*	4.78 (0.98–23.40)*	1.15 (0.25–5.34)
CBT only				
Unadjusted	0.55 (0.16–1.92)	3.43 (0.97–12.09)*	2.50 (0.51–12.17)	1.01 (0.23–4.45)
Adjusted	0.48 (0.12–1.97)	3.53 (0.99–12.58)*	2.50 (0.51–12.24)	1.01 (0.23–4.44)
CM only				
Unadjusted	2.53 (0.76–8.44)	2.40 (0.73–7.92)	3.27 (0.72–14.73)	2.17 (0.58–8.08)
Adjusted	2.46 (0.67–9.07)	2.68 (0.79–9.13)	2.99 (0.65–13.7)	2.04 (0.54–7.73)

* $p<0.10$.
** $p<0.05$.

Implications of findings/ conclusions for treatment and research

Participants in the CBT+CM group were over five times as likely to stop unprotected sex relative to control group (OR=5.44, $p=0.034$; see Table 3 for confidence intervals). Adjusting for drug-negative urines reduced the statistical significance of this association (OR=4.78, $p=0.054$), indicating that cessation of unprotected sex in this group may be at least partially explained by reductions in drug use. Treatment group assignment was not significantly associated with cessation of trading sex for drugs, money, or gifts (Table 3).

Treatment group assignment was not significantly associated with cessation of either injection drug use or sharing needles (Table 3). Participants randomized to receive CBT, with and without CM, were over three times as likely to stop sharing needles relative to the control group after adjusting for drug use, but this association failed to reach statistical significance at the 0.05 level (OR=3.75, $p=0.051$ for CBT+CM vs. control; OR=3.53, $p=0.06$ for CBT vs. control).

The most noteworthy findings from this study are the frequencies of cessation of self-reported drug-related and sexual risk behaviors, even among participants receiving the control treatment. Over half of participants reporting injection drug use at intake reported no injection drug use at study exit, and over 90% of participants who reported sharing needles at intake reported no needle sharing at study exit.

	Weinstein, & Sterling, 1998). The apparent cessation rates of sexual as well as drug-related risk behaviors observed in this study suggest that additional benefit may be derived from augmentation with behavioral treatment, regardless of the behavioral treatment modality. The reported behavior change may be attributable to some feature common to all treatments in this study — perhaps the increased contact with clinic staff, or the social benefits of engaging in group therapy. That increased contact with clinic staff might promote reductions in HIV risk behavior is plausible, given results from a demonstration project for stimulant abuse that found both longer duration of treatment and more intense "doses" of psychosocial treatment to be significantly associated with increases in a measure of safe sex data. There was a very limited treatment group effect: participants randomized to receive CBT+CM were significantly more likely to report stopping unprotected sex during the study. However, this effect was no longer significant after adjusting for drug-negative urines, indicating that reductions in unprotected sex reported by this group may be at least partially explained by reductions in drug use. These findings differ from those reported by two prior studies of CBT to reduce HIV risk behaviors in methadone-maintained outpatients: both studies showed that CBT was associated with reductions in injecting risk but not sexual risk behaviors (Baker et al., 1993; O'Neill et al., 1996). The discrepancy
Limitations of research	**Although this study is aimed at reducing sexual risk behaviours which lead to HIV it does record drug use & treatment types and effect.** The findings of this study must be interpreted cautiously given its limitations, the most serious of which is an outcome measure based exclusively on self-report. It is possible to validate some self-reported HIV risk behaviors with collateral reports from participants' sexual partners, but that was not done in this study. Sexual activity and illicit substance use are very private behaviors; study participants may be less than forthcoming regarding the nature and frequency of these behaviors, even when confidentiality is assured. Since questions regarding HIV risk behaviors tend to be retrospective,
Relevance to review aims	Yes

Record	44
Author/s	Shirley J. Semple, Steffanie A. Strathdee, Jim Zians & Thomas L. Patterson
Title	Correlates of Trading Sex for Methamphetamine in a Sample of HIV-Negative Heterosexual Methamphetamine Users
Journal and page numbers	Journal of Psychoactive Drugs, 43:2, 79-88
Year of publication	2011
Country where research took place	enrolled in a sexual risk reduction intervention in San Diego, California, US
Recruitment site	Outreach workers placed posters in neighbourhoods known to have high concentrations of methamphetamine users, and weekly advertisements were placed in local magazines and newspapers. Additional recruitment was achieved through referrals from case managers and staff at social service and public health agencies. Participants were also referred to the project through enrolled participants as well as by their family and friends.
Sample description	These analyses used baseline data from a sample of 342 HIV-negative, heterosexually-identified men and women who were enrolled in a sexual risk reduction intervention that was designed to reduce sexual risk practices, depressive symptoms, and methamphetamine use in the target population (Semple et al. 2009). Data for these analyses were collected between December 2006 and November 2009. Eligible participants were at least 18 years of age, male or female, self-identified as heterosexual, and reported having unprotected vaginal or anal sex with at least one opposite-sex partner in the previous two months. Participants also had to report having used methamphetamine at least twice during the past two months and at least once in the past 30 days. Several exclusion criteria were applied: not sexually active or always used condoms with all partners in the past two months; unprotected sex only with a spouse or steady partner (i.e., monogamous relationship); trying to get pregnant or trying to get partner pregnant; psychiatric diagnosis with current psychotic symptoms or suicidal ideation; and currently enrolled in a formal outpatient or residential drug treatment program. Because of the mood-regulation component of the intervention, individuals who scored three or less on the seven-item Beck Depression Inventory-Fast Screen (BDI-SF) for medical patients were excluded (Beck, Steer & Brown 2000). All participants provided written informed consent. The research protocol was reviewed and approved by UCSD's Human Research Protections Program
Design and methods	Motivational interviewing concepts, social cognitive strategies, and cognitive behavioural therapy to promote positive behaviour change in the three targeted areas baseline assessment, which was administered through computer-assisted self interviewing technology (audio-CASI; Turner et al. 1998) Participants were compensated $30 for the baseline assessment. **Measures** ***Trading sex.*** Sex trading behavior was determined by the following question: "In the past two months, did you trade sex for methamphetamine?" A dichotomous response category was used (1 = traded sex for methamphetamine in the past two months; 0 = did not trade sex

Analysis	
Key findings (relevant to the project)	Many suffer from mental health conditions that sometimes interfere with their access to drug treatment and other social services
Implications of findings/ conclusions for treatment and research	
Limitations of research	
Relevance to review aims	No. The study addresses factors associated with trading sex exclusively for methamphetamine, does not look at barriers to treatment or best practice.

Record	45
Author/s	K. Shannon, M. Rusch, J. Shoveller, D. Alexson, K. Gibson, and M.W. Tyndall
Title	Mapping violence and policing as an environmental–structural barrier to health service and syringe availability among substance-using women in street-level sex work
Journal and page numbers	International Journal of Drug Policy 19 (2008) 140–147
Year of publication	2008
Country where research took place	Vancouver, Canada
Recruitment site	Through targeted out-reach centres
Sample description	198 women All women who use substances within the last 6 months (not including Cannabis) and were actively engaged in survival sex work were invited to participate.
Design and methods	Based on initial pilot mapping sessions, 198 women were invited in 2006 to participate in **interview-administered questionnaires and mapping** through targeted outreach to sex work strolls and time space sampling strategies (93% response rate). Interview-questionnaires, administered by trained peer researchers elicited responses related to demographics, health and addiction service use, violence and safety concerns, local policing and sexual and drug-related harms. At the time of interview visit, women were asked to map their community and access to resources, with the last 6 months as a reference point. Using a street map of Vancouver, women were asked to mark places where they: (a) lived and worked; (b) considered to be high and low risk to their personal safety; (c) avoided when working due to recent violence; (d) avoided when working due to local policing (inclusive of police presence and harassment); (e) accessed and disposed of syringes; (f) accessed health/support resources. In order to map health service and syringe exchange availability, women were asked to mark all services they were aware of and had used within the last 6 months. Results were compiled **used ArcGIS software and GIS street maps** provided by the City of Vancouver. Given significant overlap in mapping of avoidance areas due to violence and avoidance due to policing, avoidance areas were combined for the purposes of geographic analysis. Both the community partner and peer research team (women with a lived experience of survival sex work) were involved in the conception, design and implementation of the research.
Analysis	ArcGIS (ESRI) and STATA statistical software (Statacorp, version 8.2, TX, USA) were used for analyses. The aim of the analysis was to map the geographic relationship between health service and syringe availability and the avoidance of a physical setting due violence and policing using ArcGIS. - Focusing on geographical units defined by streets or blocks, rather than on individual participants. - In order to elucidate environmental–structural level barriers, the outcome variable was areas of avoidance of a physical place due to recent violence and policing, measured by proportion of women identifying any one geographical unit as an area

	In a secondary analysis, logistic regression was used to model this geographic association and obtain an adjusted effect. In order to minimize potential confounding due to overlap of working areas with the core area, the logistic regression model was adjusted for the proportion of women working in a given area. - demographic and drug use variables from the interview-questionnaire were use to stratify models
Key findings (relevant to the project)	**Aim:** Study sought to explore the relationship between health service and syringe availability and avoidance of physical settings due to recent violence and policing at the geographic level. There is a strong geographic relationship between health and syringe availability and avoidance of physical settings due to violence and policing that does not consider individual level associations. our findings suggest that **less than half of women engaged in street-level sex work had accessed a mobile resource** peerbased outreach and mobile prevention efforts need to include widespread provision of safer crack use kits and mouthpiece exchange, not currently available in Canada
Implications of findings/ conclusions for treatment and research	**Barrier:** Geographical location of services may need to be considered taking into account of service users fears of particular locations. our findings support the need for more extensive analyses of the role of specific environmental–structural factors that mediate harm reduction and prevention efforts among women in survival sex work at the individual level
Limitations of research	May not be generalisable to the UK population
Relevance to review aims	Yes. Service barriers.

Record	46
Author/s	Kate Shannon, Vicki Bright, Janice Duddy, and Mark W. Tyndall
Title	Access and Utilization of HIV Treatment and Services Among Women Sex Workers in Vancouver's Downtown Eastside
Journal and page numbers	Journal of Urban Health: Bulletin of the New York Academy of Medicine, Vol. 82, No. 3
Year of publication	2005
Country where research took place	Vancouver, Canada
Recruitment site	WISH Drop-In Centre
Sample description	159 women sex workers attending the WISH Drop-In Centre participated in a baseline survey
Design and methods	Participants were recruited through random allocation of referral cards during evening drop-in hours. The questionnaires were administered to women onsite and ascertained sociodemographic characteristics, illicit drug use, HIV/hepatitis C virus (HCV) testing and status, previous use of antiretroviral medications, and attitudes towards access, acceptability, and adherence to therapy. All health service and drug use behaviours were self-reported using a 6-month reference point at the time of interview
Analysis	Attitudes towards access, acceptability, and adherence to therapy were assessed using 3- and 5-point Leikart Scales. This analysis was cross-sectional in nature, and thus, descriptive statistics were used to describe sociodemographic characteristics, health and addiction service use, drug use patterns, and previous diagnostic testing. Mean averages were used to describe normally distributed variables, and median averages were used to describe skewed variables. The University of British Columbia/Providence Healthcare Research Ethics Board approved this study.
Key findings (relevant to the project)	Overall, there was a high uptake of both primary care (health clinic and mobile health van) and emergency room services among WISH participants. The high rates of emergency room use, in addition to primary care, is likely a reflection of the overall poor health status of women, the highly unstable lifestyle patterns, high rates of addiction, inaccessible clinic hours during evenings, and a lack of womenspecific services.24 In addition, women reported a high level of contact with frontline workers and use of harm reduction initiatives, attesting to a much higher uptake of low-threshold and more easily accessible services among this group. Notably, more information concerning the frequency and type of services accessed would provide important information.
Implications of findings/ conclusions for treatment and research	This is addressing greater uptake of HIV treatment and prevention measure, and whilst some barriers to services may be relevant to drug treatment services the questions are specifically directed at HIV so potentially not relevant study for this project
Limitations of research	

Relevance to review aims	Potentially. This is addressing greater uptake of HIV treatment and prevention measure, and whilst some barriers to services may be relevant to drug treatment services the questions are specifically directed at HIV so potentially not relevant study for this project

Record	47
Author/s	S. G. SHERMAN, D. GERMAN, Y. CHENG, M. MARKS, & M. BAILEY-KLOCHE
Title	The evaluation of the JEWEL project: An innovative economic enhancement and HIV prevention intervention study targeting drug using women involved in prostitution
Journal and page numbers	AIDS Care, January; 18(1): 1-11
Year of publication	2006
Country where research took place	Baltimore, Maryland, US
Recruitment site	Potential study participants were recruited through targeted outreach in a neighbourhood with high rates of drug use and street prostitution. Additionally, the study was publicized at a nonprofit organization in the target neighbourhood that provides services to women involved in prostitution and at the Baltimore Syringe Exchange Program van which was parked in the neighbourhood twice a week. Women were approached by trained study recruiters who had extensive experience working with the target population in previous studies.
Sample description	**54 women** were recruited into the Jewellery and Education for Women Empowering their Lives (JEWEL) study. The study **inclusion criteria** were: being female; being 18 to 45 years of age, having traded sex for money or drugs in the past month; and having used heroin and/or cocaine at least weekly in the past month. Of the 98 women screened, 77 (79%) women were eligible and of those, 55 (70.0%) women attended the study's first intervention session. Of those, 50 (91%) returned for their 3-month follow-up survey.
Design and methods	The intervention was comprised of six 2-hour sessions that taught HIV prevention risk reduction and the making, marketing and selling of jewellery. The current study describes results from a pilot economic enhancement HIV prevention intervention study upon sexual and drug-related risk behaviours among women drug users involved in the sex trade. Economic enhancement was the broader framework of the study in that it was designed to address environmental barriers to prevention such as lack of access to sustainable and licit income (Beeker et al., 1998; Zimmerman, 2000; Zimmerman, 1995; Brown, 1991). The pilot study had **three primary aims**: 1) to assess the feasibility of training drug using women how to make, market, and sell beaded jewellery; 2) to enhance women's HIV transmission knowledge, provide risk, and critical thinking skills; and 3) to enhance women's job self efficacy by providing them training in the making, marketing and selling of beaded jewellery. The pre- and 3-month post-intervention study was conducted in Baltimore, Maryland. Between December, 2002 and June, 2003, 54 women were recruited into the Jewellery and Education for Women Empowering their Lives (JEWEL) study. The study inclusion criteria were: being female; being 18 to 45 years of age, having traded sex for money or drugs in the past month; and having used heroin and/or cocaine at least weekly in the past month. If women were eligible for the study and agreed to consent, they were administered a behavioural survey and locator information was collected to inform them of the start date of the intervention. In total, 54 women participated in six cohorts of the six-session intervention. Follow-up interviews were conducted at three months after

	completion of the intervention. Four women were ineligible for followup: two were incarcerated; one was hospitalized; and one was in a long-term drug treatment facility. Fifty women received the follow-up survey, resulting in a follow-up rate of 90%. Of the 98 women screened, 77 (79%) women were eligible and of those, 55 (70.0%) women attended the study's first intervention session. Of those, 50 (91%) returned for their 3-month follow-up survey. The first-session attendance rate is acceptable in light of those reported by large randomized behaviouralinterventions (Latkin et al., 2002; NIMH, 1998). The HIV prevention content in specific sessions was as follows: Session 1 _ drug related risk reduction; Session 2 _ sexual risk reduction in the context of primary, casual and trade sexual partners and related role pays; Session 3 _ male and female condom demonstration, practice, and related role plays; and Session 4 _ the connection between drug use and sex. The jewellery making lessons were conducted by a local artist with extensive experience in making beaded jewellery.
Analysis	Chi-square tests were used to compare dichotomous and categorical data and paired t-tests for matched observations were used to analyse continuous variables. Unadjusted and adjusted multiple linear regression was employed to examine correlates of the change in the number of sex trader partners from baseline to follow-up. Independent variables found to be significant below the 0.20 level in univariate analyses or those that were hypothesized to be potentially associated with the outcome was entered into the exploratory multivariate regression models.
Key findings (relevant to the project)	Pre- and three-month post intervention comparisons of recent drug utilization and sexual risk patterns are displayed in Table III. There were significant reductions in a number of reported drug use behaviours prior to, and three months after the intervention: daily drug use (76.0% versus 55.0%, respectively, p<0.0003); daily crack use (27.3% vs. 13.13%, respectively, p<0.0140); injection drug use (55.6% vs. 35.6%, respectively, p<0.0027); the median amount of money spent on drugs on a typical day ($52.57 USD vs. $46.71 USD, respectively, p<0.001). JEWEL participants also reported significant. reductions in sexual behaviours before compared to three months following the intervention, including: their median number of sexual contacts per month (10.0 vs. 3.0, respectively, p< 0.010); condom use during vaginal sex with sex trade partners (53.0% vs.75.0%, respectively, p<0.03); and participants' median number of monthly sex trade partners (9.0 vs. 3.0 respectively, p<0.025). From baseline to follow up, 15% of participants reported a higher number of sex trade partners, 12.5% reported the same number of sex trade partners, and 72.5% reported fewer sex trade partners (data not shown).
	Table II. Recent (past three months) sources of income and job self efficacy score*, baseline and 3-month follow-up, JEWEL participants, $n = 50$. Sources[+] — Baseline % — 3-month follow-up % — *P*-value** State/federal benefits — 43.2 — 51.1 — 0.248 Parent/Friend/Relative — 54.6 — 46.7 — 0.248 Traded sex for drugs/money — 100.0 — 71.0 — <0.0005 Part of full time licit job — 23.8 — 26.2 — 0.500 Theft — 13.6 — 6.7 — 0.453 Selling needles — 25.0 — 12.2 — 0.059 Selling drugs — 35.0 — 10.5 — 0.021 Touting/publicizing drugs — 30.9 — 13.6 — 0.052 Street Security — 12.5 — 2.4 — 0.179 Mean (SD) job self-efficacy score — 2.6 (0.07) — 2.9 (0.07) — 0.004 *Notes:* [+] Categories not mutually exclusive. *Last three months. ***P*-values obtained using Students t-test for matched observations for continuous data and McNemar's Test for categorical data.

	Table IV. Univariate and multivariate linear regression model for the change in the number of monthly sex trade partners from baseline to follow-up, among JEWEL participants ($n = 50$). Bivariate Models / Multivariate Models Variable — Parameter Estimate — Standard Error — *P*-value — Parameter Estimate — Standard Error — *P*-value Intercept – – – 15.2 9.2 0.11 African American (vs. White) 20.6 14.9 0.20 – – – Older age (≥39 years of age*) 17.5 14.2 0.23 – – – Ever dropping out of school −13.9 14.8 0.35 Income from jewellery sale ($USD) 0.09 0.04 0.033 0.08 0.03 0.013 Baseline job self-efficacy score* 21.4 9.04 0.024 10.5 7.3 0.16 Baseline drug expenditure ($USD) −0.4 0.08 <0.0001 −0.3 0.08 0.0002 Daily drug use at baseline 25.1 15.5 0.11 – – – Injection at baseline 5.3 14.5 0.72 – – – *Note:* *Centred at mean (2.54).
Implications of findings/ conclusions for treatment and research	The study describes a novel intervention that aimed to reduce women's drug and sex-related HIV risk behaviours as well as increase their belief in their ability to earn money through licit means by making, marketing and selling beaded jewellery. To our knowledge, this pilot study was the first to engage an active drug using population in such an economic enhancement project. Through the creation of an economically enabling environment in combination with enhancing women's HIV risk reduction skills, participants reduced selected sexual and drug-related HIV risk behaviours. Specifically, women reported significantly lower rates of noninjection (i.e. crack smoking) and injection drug use as well as a reduction in the number of all sexual partners and sexual trade partners. Compared to the baseline survey, women also reported significantly lower rates of illegal sources of income at follow-up.
Limitations of research	First, the small number of study participants prevented evaluation of the intervention's effects on important but relatively rare behaviours such as condom use with steady and casual partners and inhibited our ability to utilize multivariate modelling of drug use patterns. Second, the lack of a control group prevented our teasing a part the effects of the HIV prevention and jewellery-making components on behaviour change.
Relevance to review aims	Partly. Intervening on this level not only serves the public health aim of reducing HIV in this population, but addresses low income populations' desire to ameliorate their economic circumstances.

Record	48
Author/s	Mark Simpson, Julie McNulty
Title	Different needs: Women's drug use and treatment in the UK
Journal and page numbers	International Journal of Drug Policy, 19; 169–175
Year of publication	2008
Country where research took place	n/a
Recruitment site	n/a
Sample description	Literature review
Design and methods	This is a commentary of drug services in the UK, not primary research. – literature review
Analysis	n/a
Key findings (relevant to the project)	Women present to services with different problems and characteristics and, while in overall terms do not appear to be under-represented, this is not to suggest that the problems women drug users face are adequately addressed in current treatment configurations. (Best & Abdulrahim, 2005, p. 2). This is the entire section within the paper on sex workers: *Services for women engaged in sex work* Outreach services and evening opening hours are particularly valuable aspects of services providing treatment for female sexworkers who use drugs (May, Edmunds,& Hough, 1999; Nuttbrock, Rosenblum, Magura, Villano, & Wallace, 2004). Many drug treatment services, however, do not tailor their services accordingly. Some have suggested a general lack of awareness among drug agency staff in relation to the needs of female sex workers who are drug users (Pitcher & Avis, 2003).
Implications of findings/ conclusions for treatment and research	Puts forward the recommendation for gender tailored services.
Limitations of research	Very little relevance to the study – all that is on sex workers is in the above section
Relevance to review aims	Partly but not focused on recovery or sex workers.

Record	49
Author/s	FRANCES M. SMITH AND LISA A. MARSHALL
Title	Barriers to effective drug addiction treatment for women involved in street-level prostitution:a qualitative investigation
Journal and page numbers	Criminal Behaviour and Mental Health **17**: 163–170
Year of publication	2007
Country where research took place	Glasgow, UK
Recruitment site	Interviews were conducted with an opportunity sample of nine women who volunteered to participate, gave informed consent and attended 'Base 75', an integrated service for women involved in prostitution developed through a partnership between Social Work Services and the National Health Service. The service is based in a drop-in centre in the city of Glasgow, accessible through self-referral. It provides support and healthcare services for women involved in prostitution.
Sample description	**9 women** accessible through self-referral to 'Base 75' women who engage in street-level prostitution. Eligibility criteria: (1) they were currently engaging in prostitution (having offered sex for money within the last four weeks); (2) they had used either opiate and/or stimulant drugs on at least four occasions within the last four weeks; and (3) their drug use was perceived by themselves as problematic.
Design and methods	**AIM:** There is little or no psychological research, however, focused on understanding the barriers to treatment for these women. Our study, therefore, was a qualitative investigation of their perspective. Qualitative interviews, opportunistic sample
Analysis	**In-depth interviews** were conducted with each participant in a private room within the Base 75 establishment. Interviews were tape-recorded, transcribed and then analysed for recurrent themes using **Interpretative Phenomenological Analysis** (IPA, see Smith, 1996; Reid et al., in press).
Key findings (relevant to the project)	The age range of participants was from 23 to 55 years. The length of time spent involved in prostitution ranged from 3 to 18 years. All of the women interviewed were injecting opiate users, with the amount of heroin injected daily ranging from one to eight 'bags'; most of the women used additional substances including cocaine and tranquillizers when these drugs were available. All of the women cited opiate addiction as instigating their initial engagement in prostitution. The number of days and/or nights the women 'worked' was dictated by the extent of their opiate addiction: all of the participants sold sex seven nights per week and three women also operated during daytime hours. **barriers to effective drug addiction treatment –** (themes emerged are the headings below) *(1) Impoverished sense of self-worth* *"*You go up to the counter and when they know what you're there for, they look at you as if you're dirt. You are not allowed to buy anything but told to leave once you get your

	methadone . . . if you're a drug addict, they automatically think 'junkie scum'. You just think fuck it, if everybody thinks you're scum, you might as well keep usin' [taking heroin]. . . .*" from interview* Stigma and effects *(2) Trust and consistency* trust emerged as a powerful mediator of treatment efficacy M: "Coming back to reality is terrifying . . . the drugs numb you for a long . . . time . . . you're desperate . . . you need to be able to trust the person . . . know that they'll be there" – *from interview* . When Marnie speaks of her worker 'being there', she is referring to a long-term relationship with one person, who can assist her both in addressing the physiological addiction to the substance(s) and the psychological problems that the drugs have served to suppress. Failure to meet this need appears to constitute a major barrier to successful drug treatment. **a change in support worker during treatment was seriously detrimental to the women's progress, with a net result of service disengagement. Reasons for this cited by the women were:** 1) women are fragile and difficult to engage with a new person, 2) "recite one's life history for each new member of staff encountered is felt as traumatic and reinforces the belief in the women that they are not 'worth the bother';", 3) "from the women's perspective, the crucial element of trust is removed from the treatment setting" *(3) Absence of a comprehensive treatment package* Failure on the part of social workers or clinicians to recognize this (physiological addiction, and that substances serve as a buffer against psychological distress) constitutes a further barrier to successful drug treatment. M: No . . . it seems to be a general thing . . . they're just dealing with the addiction . . . you're just papped on [prescribed] methadone . . . when you fi nally get seen, your in an' out in minutes . . . you're just another addict . . . if you come here [drop-in centre], you can chat with one of the workers. . . . F: Can you tell me a bit more? T: Em . . . either way, you're no' really gettin' to the bottom of your issues. . . . F: **In your opinion how could the services . . . be improved?** T: **If everythin' was gettin' dealt with at the one time. . . .** Implicit in her account is the signifi cance of context in the treatment process. The objectifi cation of her as 'just another addict' in the fi rst setting is sharply contrasted with the emotional support she experiences in the second. Interestingly, for Tracy, neither setting is conducive to addressing the issues involved in her problematic drug misuse. For this population, there seems to be a need for structured support as well as substitute prescribing. *(4) Discrepancy between 'readiness for treatment' and availability of services* the decision to seek help for addiction is not necessarily underpinned by a rational thought process, but rather a sense of desperation. As such, it does not necessarily coincide with the availability of service provision. M: 'It's no' easy to get off the roller coaster a drug use and prostitution when the drugs are controlling your life . . . you need to grab the chance when it comes . . . but when you're ready, there's no services ready . . . I've been there so many times . . . I always think, maybe next time . . . but every time, I end up in deeper and deeper. (interview) M: I was sick of drugs . . . I was sick of the lifestyle . . . I felt so depressed . . . I just had enough . . . I wanted my kids back . . . I wanted my life back. I was determined not to use [drugs] but I was feeling desperate . . . I phoned . . . fi rst thing, but my worker wasn't available 'til 2 o'clock . . . I used [drugs] to help with the depression

	and then I was back to square one. *(5) Lack of provision for opiate-addicted couples* *some* women engaged in prostitution are maintaining both their own and their partner's drug habit. For this population, the transition to a drug-free life is described as 'next to impossible'. Julie "When there's two of you usin' [taking heroin], you can never get a methadone prescription at the same time. You don't get dealt as a couple even though you need tae come off it [heroin] as a couple. There's no point in one of us comin' off it . . . the two of you have to go [for treatment] at exactly the same time."
Implications of findings/ conclusions for treatment and research	Trust and consistency of service provider (worker on the ground) is necessary to ensure client feels secure in the treatment and aid retention. "Whilst a change in therapist may be problematic for service users in general, the vulnerable nature of this population makes continued support from a key worker more vital." Timing is important in the context of successful treatment for addictive behaviour, Current service provision does not appear to accommodate this aspect of treatment Our findings also suggest that current services are ill equipped to accommodate the needs of drug-addicted couples. Offering drug treatment to drug-addicted women and their addicted partners separately is insufficient: for couples in this situation, drug treatment needs to be synchronized for maximum effect (Hunter and May, 2004). - any control or power issues can be addressed alongside this also. Complex needs require intense social and psychological support to be available when they express a desire to address their drug issues. A uniform approach to treating the drug addiction *per se* may be needed, as services often offer competing models and philosophies of intervention.
Limitations of research	**As the sample size is small** although consistency of the women's accounts was high, the results may not be generalizable to the wider population of women involved in street-level prostitution, or women involved in such prostitution in other countries and cultures. Addresses barriers well, and puts forward suggestions to improve services, but does not include current best practice.
Relevant to review aims	Yes

Record	50
Author/s	William Spice
Title	Management of sex workers and other high-risk groups
Journal and page numbers	Occupational Medicine; 57:322–328
Year of publication	2007
Country where research took place	n/a
Recruitment site	There are four main categories of health risks faced by workers in the commercial sex industry. These relate to the acquisition of sexually transmitted infections (STI), harm through violence from clients or pimps, factors associated with the use of drugs and mental health.
Sample description	n/a
Design and methods	In-depth review
Analysis	n/a
Key findings (relevant to the project)	The UKNSWP calls for managed zones for street sex work, pointing to the success of projects in Holland and Cologne. **By relocating street work to non-residential areas, managed zones improve safety for workers, build good relations with the police, allow regular access to services and reduce the interdependence between street work and drugs**. Such proposals were well received in consultations with street workers throughout the UK. In contrast, among those wishing to exit the industry, provision of safe house and hostel accommodation, counselling services and peer support groups were highlighted. Other **gaps in service provision included** dedicated exiting programmes, outreach services, treatment for depression, support following sexual assault, education programmes and community safety strategies Service providers must therefore be prepared to overcome these barriers and seek to establish trust by providing surroundings in which confidentiality, non-judgemental attitudes and sympathetic listening predominate. Out-reach service - One successful pilot scheme in Liverpool involved engaging a wide range of CSW including male workers. A nurse practitioner established links with escort agencies, indoor premises, street workers and a number of outreach projects in order to build trust and provide fast-track clinic appointments for both workers and their partners [51]. The Sex Workers in Sexual Health Project in Coventry reported on 10 CSW who had successfully exited over 2 years [60], but few services exist owing to funding constraints and lack of multi-agency co-operation, with the majority concentrating on harm reduction rather than exiting (Exiting prostitution rather than drug rehabilitation).

Implications of findings/ conclusions for treatment and research	Exit programmes therefore need to be holistic and tailored to individual vulnerabilities
Limitations of research	Highlights implications and risks of prostitution rather than how to help minimise the risks, though does look towards this.
Relevance to review aims	Partly. Focus not on recovery.

Record	51
Author/s	STEFFANIE A. STRATHDEE, CARLOS MAGIS-RODRIGUEZ, VICKIE M. MAYS, RICHARD JIMENEZ, AND THOMAS L. PATTERSON
Title	The Emerging HIV Epidemic on the Mexico-U.S. Border: An International Case Study Characterizing the Role of Epidemiology in Surveillance and Response
Journal and page numbers	Ann Epidemiol; 22:426–438
Year of publication	2012
Country where research took place	Mexico
Recruitment site	
Sample description	
Design and methods	We draw from quantitative and qualitative cross-sectional and prospective epidemiologic studies and ehavioural intervention studies among IDUs and FSWs in Tijuana, Baja California, and Ciudad uarez, Chihuahua.
Analysis	Not relevent – specifically addresses HIV not drug treatment
Key findings (relevant to the project)	
Implications of findings/ conclusions for treatment and research	
Limitations of research	
Relevance to review aims	No.

Record	52
Author/s	Steffanie A. Strathdee, Brent Mausbach, Remedios Lozada, Hugo Staines- Orozco, Shirley J. Semple, Daniela Abramovitz, Miguel Fraga-Vallejo, Adela de la Torre, Hortensia Amaro, Gustavo Martínez-Mendizábal, Carlos Magis-Rodríguez, and Thomas L. Patterson
Title	Predictors of Sexual Risk Reduction Among Mexican Female Sex Workers Enrolled in a Behavioral Intervention Study
Journal and page numbers	Journal of Acquired Immune Deficiency Syndrome, May 1; 51(Suppl 1): S42–S46.
Year of publication	2009
Country where research took place	Tijuana and Ciudad Juarez, Mexico
Recruitment site	Between January 2004 and January 2006, outreach workers and municipal and community health clinics recruited 924 female sex workers (FSWs) in Tijuana and Ciudad Juarez into a behavioral intervention study to increase condom use.
Sample description	924 female sex workers (FSWs) Eligibility requirements included an age of at least 18 years and having traded sex for drugs, money, or other material benefit within the previous 2 months. Participants were also required to have had unprotected vaginal sex with at least 1 client in the past 2 months and were excluded if they had previously tested HIV positive.
Design and methods	We hypothesized that reductions in unprotected sex among FSWs randomized to the intervention would be mediated by increases in HIV knowledge, self-efficacy (eg, confidence in one's ability to use condoms), and outcome expectancies (eg, belief that using condoms successfully reduces the risk of acquiring HIV/STIs), consistent with social cognitive theory.11 In addition to testing these hypotheses, we determined whether efficacy of this intervention was reduced among FSW-IDUs, given that high proportions of these FSWs reported that they and/or their clients use drugs during sexual transactions. – Point to note: Substance use is only addressed within this research as a comparison to non-substance users and the difference between the two in relation to reducing sexual risk taking behaviours. After providing informed consent, an interviewer-administered survey was conducted in Spanish in a private location. Participants also provided a blood draw and cervical swab and were compensated US $30. Randomization to either the intervention [“Mujer Segura” (healthy woman) intervention] or the didactic control condition was performed on a weekly basis within each city using a fixed computer-generated randomization scheme. Because the emphasis of the current article was to determine within-group factors that predicted response to the intervention, the current analysis was restricted to 409 FSWs randomized to the intervention arm. clinic-based health care staff and indigenous *promotoras* (outreach workers) were trained as counselors to deliver a culturally sensitive sexual risk reduction intervention that was tailored to the needs, values, beliefs, and behaviors of FSWs. The intervention was based on social cognitive theory and sought to increase knowledge, self-efficacy, and outcome expectancies regarding safer sex. To increase participants’ motivations to practice safer sex, we utilized motivational interviewing techniques (eg, key questions, reflective listening, summarization, affirmation, and appropriate use of cultural cues).

	Mujer Segura Intervention This intervention was based on pilot work in Tijuana17 and our experience conducting sexual risk reduction interventions in the United States.9,10 A detailed description of the intervention is given elsewhere.11 In brief, clinic-based health care staff and indigenous *promotoras* (outreach workers) were trained as counselors to deliver a culturally sensitive sexual risk reduction intervention that was tailored to the needs, values, beliefs, and behaviors of FSWs. The intervention was based on social cognitive theory18 and sought to increase knowledge, self-efficacy, and outcome expectancies regarding safer sex. To increase participants' motivations to practice safer sex, we utilized motivational interviewing techniques (eg, key questions, reflective listening, summarization, affirmation, and appropriate use of cultural cues).19 The intervention focused on: (1) identifying motivations for practicing safer sex (eg, protecting one's own health, avoiding STIs) and unsafe sex (eg, financial gain); (2) barriers to condom use (eg, threat of physical violence, client refusal) and motivations for using condoms (eg, to feel clean); (3) negotiation of safer sex with clients; and (4) enhancing social support. Participants role-played interactions with clients and were asked to weigh advantages and disadvantages of practicing the behavior using the "decisional balance" approach.19 Once awareness of the problem was achieved and the balance began to shift in favor of positive change, the participant and counselor developed an action plan and problem-solved barriers to implementation.
Analysis	
Key findings (relevant to the project)	Of 409 FSWs who were randomized to the intervention, 66 (16.1%) had injected drugs. Overall, 342 (84%) returned for a 6-month follow-up visit. As seen our final model (Table 2), greater increase in self-efficacy was associated with greater increase in percent condom use (t = 2.66, P = 0.008). This effect was not moderated by injection drug use (t for interaction = 0.78, P = 0.44), suggesting that change in self-efficacy was associated with change in condom use regardless of injection status. In contrast, there was a significant interaction between injecting drug use and change in HIV knowledge (t = 2.13, P = 0.034), suggesting that injection drug use may modify the relation between change in knowledge and change in condom use. A post hoc analysis indicated that among FSW-IDUs, change in knowledge was positively associated with change in percent condom use (t = 2.26, P = 0.025). However, among FSWs who were noninjection drug users, change in HIV knowledge was not significantly associated with change in percent condom use (t = 0.06, P =0.950). Repeating all analyses controlling for site yielded no appreciable differences.
Implications of findings/ conclusions for treatment and research	Not relevant study – Main focus is on sexual risk tacking reduction, not drug treatment.
Limitations of research	
Relevance to review aims	No.

Record	53
Author/s	Steffanie A. Strathdee, Morgan M. Philbin, Shirley J. Semple, Minya Pu, Prisci Orozovich, Gustavo Martinez, Remedios Lozada, Miguel Fraga, Adela de la Torre, Hugo Staines, Carlos Magis-Rodrıguez, Thomas L. Patterson
Title	Correlates of injection drug use among female sex workers in two Mexico–U.S. border cities
Journal and page numbers	Drug and Alcohol Dependence, 92, 132–140
Year of publication	2008
Country where research took place	Mexico - Tijuana and Cd. Juarez, situated on the Mexico–U.S. border
Recruitment site	In both cities, recruitment involved both clinic-based and street outreach approaches using clinic staff and *promotoras* (outreach workers) who were all trained on study procedures prior to beginning the study. All staff recruiters were Mexican, most were female, some were ex-drug users or former sex workers At clinics,women were approached by these staff recruiters after they checked in for their appointment and were offered participation in a non-coercive manner. Street outreach took place in areas where FSWs worked, such as streets, bars, brothels and massage parlors, both inside and outside the *zonas rojas.* Street recruitment was facilitated through storefront offices in locations where FSWs worked, and through the use of mobile clinics equipped with an examination room and a counselling room. On the streets and in sex work venues, *promotoras* approached FSWs at all hours of the day and night, explained the study, and invited them to participate
Sample description	Between January 2004 and March 2005, a total of 924 FSWs were recruited inTijuana (*N*= 474) and Cd. Juarez (*N*= 450) into a behavioral intervention study that aimed to increase condom use. Eligibility requirements included being at least 18 years of age, providing informed consent and having traded sex for drugs, money, or other material benefit within the previous 2 months. Since this was an intervention study, women were also required to have had unprotected vaginal sex with at least one client in the past 2 months, and were excluded if they reported that they had previously tested HIV-positive. **injection drug use was not an inclusion criterion**
Design and methods	f**ace-to-face interview** was conducted as part of a safer sex intervention which focused on **motivational interviewing** and **increasing self efficacy** among FSWs, We examined the extent to which four domains differed between FSWIDUs and other FSWs: (i) baseline sociodemographic characteristics, (ii) social influences, (iii) risk behaviors, and (iv) HIV/STIs. *Laboratory testing* The “Determine” rapid **HIV** antibody test was initially conducted to determine the presence of HIV antibodies (Abbott Pharmaceuticals, Boston, MA). All reactive samples were then tested using HIV-1 antibody by EIA andWestern blot. **Syphilis** serology was conducted using the rapid plasma reagin (RPR) test (Macro-Vue, Becton Dickenson, Cockeysville, MD, USA). All RPR-positive samples were subjected to confirmatory testing using the *Treponema pallidum*
Analysis	Statistical analyses focused on comparisons between FSWs who reported injecting drugs within the last 2 months (FSW-IDUs) compared to FSWs who did not. Analyses were conducted on baseline data only. Continuous data were examined using Wilcoxon rank sum tests for differences in group distributions

	while binary data were examined using Fisher's exact tests.
Key findings (relevant to the project)	Not relevant – not related to substance misuse treatment, barriers to services or best practice – main focus is on sexual risk behaviours
Implications of findings/ conclusions for treatment and research	
Limitations of research	
Relevance to review aims	No.

Record	54
Author/s	Catherine Woodstock Striley, Sharon D. Johnson & Linda B. Cottler
Title	Health Care Disparities Among Out-of Treatment Cocaine Users in St. Louis
Journal and page numbers	Missouri Medicine, January/February 2008, Vol. 105, No. 1 pg 72
Year of publication	2008
Country where research took place	Missouri, US
Recruitment site	A targeted sampling plan recruited participants from St Louis in areas with high drug abuse, crime and prostitution. Two store-front sites (HealthStreet) were funded for street-based Community Health Outreach Workers who served as recruiters.
Sample description	Eligible persons were at least 18 years of age, who reported current IDU, heroin smoking, or crack cocaine use. Use was confirmed with a positive urine test or fresh needle marks 1220 people recruited
Design and methods	The St. Louis Each One Teach One study, part of the NIDA funded Cooperative Agreement provided HIV risk reduction interventions to 1220 out of treatment crack cocaine and injection drug users from 1994 to 1999 At baseline, respondents were interviewed with the NIDA Risk Behavior Assessment (RBA) 18 for health, drug and sexual behavior histories, the Substance Abuse Module (SAM DSM-IV) 19,20 and the Diagnostic Inter view Schedule, Version III-R (DIS) 21 for psychiatric and drug use histories, and a Health Services Supplement (HSS) for utilization history, barriers to care, and health beliefs. Baseline measures were completed on 1,139 persons. A three-month post-baseline follow-up interview was conducted using instruments modified for follow-up on 997 persons (88%). Baseline attitudes and behaviors towards health care were described with 13 questions covering salient and empirically-derived issues and were asked only of a sub-sample stating that in the last two years they did not see a physician even when they or their family thought they should. Drug use problems were measured by the number of criteria endorsed for DSM-III-R cocaine dependence.
Analysis	Using SAS 9.01, univariate and bivariate analyses were conducted. Chisquare analyses tested hypotheses that gender and race affect health beliefs and attitudes at baseline. Multiple testing of each specific hypothesis for attitude and beliefs were conducted, without experiment-wise corrections for Type I error, since these comparisons were planned. Between group analysis of variance was used to examine the effect of race and gender on number of health care services received in the follow-up period.
Key findings (relevant to the project)	Though the study is not specifically studying sex workers almost half the population (48% *n*=458) had specified they had traded sex. the b**arrie**r questions were only asked of those who had endorsed not seeking care when they or someone else thought they should have in the two years prior to the baseline interview (n=254). **No difference in health beliefs and attitudes were identified by race** (not shown); however, **differences were found by gender** with women reporting

	significantly more fear of being put into the hospital than men, (c2=12.08 [df=1] p<.001), reporting more fear of the treatment they would receive (c2=8.30 [df=1] p=.004) and reporting more fear of what others would say or think (c2=3.85 [df=1] p=.05). Alternatively, **men thought their problems would get better by themselves** (c2=9.37 [df=1] p=.0022). A **transportation barrier** to care was reported more often by women (c2=6.22 [df=1] p=.0127). Most medical care received occurred in clinics or emergency departments.
Implications of findings/ conclusions for treatment and research	
Limitations of research	
Relevance to review aims	Partly. The results are based on the whole population and not distinguished between those who have been prostitutes (48%) and those who have not (52%) so whilst the statistics are potentially relevant to sex workers we cannot say for certain the stats are representative of the 48%. This limits the use of this research for our purposes. Also does not speak about best practice, or specific intervention programmes.

Record	55
Author/s	Hilary L. Surratt • Steven P. Kurtz
Title	Foster Care History and HIV Infection among Drug-Using African American Female Sex Workers
Journal and page numbers	AIDS Behaviour (2012) 16:982–989
Year of publication	2012
Country where research took place	Miami, Florida, US
Recruitment site	Participants in the study were located for recruitment through traditional targeted sampling strategies. Study recruitment was carried out by a team comprised of both professional outreach workers and active sex workers. The outreach staff was indigenous to the target recruitment areas, and several members of the team had prior experience conducting outreach for local community service and treatment agencies. In addition, the use of active sex workers as recruiters provided access to many locations on and off the primary ''strolls''
Sample description	The data for this analysis were drawn from a large randomized intervention trial designed to test the relative effectiveness of two case management protocols in: (1) linking underserved African American women with health services; and, (2) reducing risk behaviors for HIV. Participants in this intervention trial were drug-using African American women who solicit clients for sex exchange on the primary and secondary prostitution ''strolls'' in Miami, Florida. Study inclusion was limited to African American women based on the authors' prior studies with sex workers in the Miami area. Eligible participants were defined as African American women ages 18–50 who had: (a) traded sex for money or drugs at least three times in the past 30 days; and, (b) used cocaine, crack, or heroin three or more times a week in the past 30 days.
Design and methods	Based on the study's targeted sampling plan, the project's intervention center was established to the north of downtown Miami near two of the major sex worker ''strolls'' in the area. Study recruiters made contact with potential participants in various street locations. Interested individuals participated in telephone screening for eligibility. Those meeting project eligibility requirements were scheduled for appointments at the project intervention center, where they were re-screened on arrival. The baseline interview was then administered, which took approximately 1 h to complete. Clients were paid a $25 stipend upon completion of the baseline interview, and each received a hygiene kit containing a variety of risk reduction materials. Follow-up assessments were conducted at 3 and 6 months post baseline. Interviews were conducted using laptop computer-assisted personal interviews (CAPI). The Global Appraisal of Individual Needs (GAIN, v. 5.4; [27]) was the primary component of the standardized baseline and follow-up assessments. The General Victimization Scale (GVS) We supplemented the GAIN instrument with items on sex work, including age at first paid sex work, and overall length of sex work. Two additional items measure foster care history. The primary item assessing this domain was: ''Were you ever placed in foster care before you were 18?'' A secondary item queried the age of first foster placement. The primary outcome measure for this analysis was HIV infection.

Analysis	All analyses were conducted using the Predictive Analytics Software (PASW formerly SPSS) version 18. Only baseline data were examined for this paper. For analysis, we dichotomized age at first paid sex work in order to examine the impact of adolescent versus adult initiation to the sex trade. We compared participants with sex work onset at age 17 or younger with those reporting onset at 18 or older.
Key findings (relevant to the project)	AIM: We explored the associations between foster placement, victimization, mental health, onset of sex work, patterns of sexual risk behaviours, and HIV infection among these highly vulnerable women. In particular, we sought to understand the connection between foster care history and age of entry into sex work and to describe their associations with HIV infection
Implications of findings/ conclusions for treatment and research	Not relevant – does not research substance treatment services or best practice. Main focus is on linking foster care placement to sexual risk behaviours.
Limitations of research	
Relevance to review aims	No. Focus is not on recovery or treatment access.

Record	56
Author/s	Hilary L. Surratt & James A. Inciardi
Title	An Effective HIV Risk-Reduction Protocol for Drug-Using Female Sex Workers
Journal and page numbers	Prevention & Intervention in the Community, 38:2, 118-131
Year of publication	2010
Country where research took place	Miami, US
Recruitment site	Targeted sampling strategies. Use of active sex workers as study outreach workers=client recruiters. This study used a cadre of 15 active sex workers as key peer recruiters over the course of the study. Participants were recruited using targeted sampling strategies (Watters & Biernacki, 1989), which are especially useful for studying hard-to-reach populations. A unique aspect of the project's recruitment strategy was the use of active sex workers as study outreach workers=client recruiters.
Sample description	drug-using female sex workers who solicited clients for sex exchange on the primary and secondary prostitution strolls in Miami-Dade County. Eligible participants were women aged 18 to 50 who had (a) traded sex for money or drugs at least three times in the past 30 days, and (b) used heroin and=or cocaine three or more times a week in the past 30 days.
Design and methods	Aim: The primary purpose of the study was to test the relative effectiveness of two alternative HIV and hepatitis B and C prevention protocols—the National Institute on Drug Abuse (NIDA) Standard Intervention and a Sex Worker Focused (SWF) Intervention that was developed specifically to reduce the risky drug use and sexual behaviors of street-based female sex workers. 806 participants were randomized to the intervention conditions: 396 to the Standard intervention and 410 to the SWF intervention Peer recruiters referred potential participants to the project intervention center where they were screened for eligibility, provided informed consent, asked to provide a urine sample for testing, and interviewed by experienced female staff members. The interview took approximately 90 minutes to complete. Immediately following the baseline interview, participants were randomly assigned to one of the two intervention conditions described above. Both interventions were delivered by peer counselors—former sex workers now in recovery from drug abuse NIDA intervention is delivered in two 60-minute sessions and provides pretest counseling on HIV, hepatitis B and C, transmission routes, risky drug use, unsafe sex practices, male and female condom use, disinfection of injection equipment, and the benefits of drug treatment. SWF intervention was also designed as a brief protocol consisting of two 60-minute sessions delivered 2 weeks apart. It provides parallel coverage of many of the topics covered in the Standard intervention, yet it discusses them in language suggested by the target population as more relevant and meaningful to female sex workers. In addition, as indicated earlier, the intervention addresses issues of special relevance to sex workers, including common misconceptions about HIV risk, techniques for avoiding violent situations, risks associated with unprotected oral sex, and common barriers to safer sex.

	Designed for peer delivery and was structured around five elements: (1) Engagement—establish rapport -participant realize that the interventionist has experienced drug abuse & sex work (2) Education—provides basic factual information about HIV=AIDS, hepatitis B and C, and behaviors that put female sex workers at risk. (3) Action—focuses on what sex workers can do to reduce sexual risks, including risks associated with oral sex, drug use, and exposure to violent situations. (4) Testing— provides information on the benefits of HIV and hepatitis B and C testing and the meaning of test results, and discusses access to testing in a supportive environment. (5) Referral—raises women's awareness of health and social services available in the community; offers assistance in accessing these resources; and builds networks with service providers. Measures Study interviews were conducted using a standardized data collection instrument based primarily on the NIDA Risk Behavior Assessment (RBA) (NIDA, 1993) and the Revised Risk Behavior Assessment modified for women. The Revised RBA was used as the primary assessment tool to examine current sexual risk behaviors
Analysis	All analyses were conducted using SPSS (version 15.0.1 for Windows). Descriptive statistics were compiled on baseline characteristics of the participants. Using t-tests for continuous variables and chi-square tests for categorical variables, baseline differences in key study outcomes were examined by intervention condition to assess the equivalence of the study intervention groups. Prior to initiating outcome analyses, the potential for differential attrition was explored by examining the baseline characteristics of 3- and 6-month follow-up completers and their lost to follow-up counterparts. Initial behavior change analyses consisted of examining differences in the group means and proportions of key study outcomes for the two intervention conditions at the 3- and 6-month contact points. Analyses were performed separately at the 3-month (baseline to 3 months) and 6-month assessments (baseline to 6 months), using an intent-to-treat approach.
Key findings (relevant to the project)	806 participants were randomized to the intervention conditions: 396 to the Standard intervention and 410 to the SWF intervention Of the 396 participants randomized to the Standard condition, 274 (69%) completed a 3-month follow-up assessment and 252 (64%) completed a 6-month follow-up assessment. Of the 410 participants randomized to the SWF condition, 272 (66%) completed a 3-month follow-up interview and 254 (62%) completed a 6-month follow-up. Although these single follow-up rates are modest, the outcome analyses were conducted with participants who completed either of the two follow-up assessments, and the global follow-up rate reached 74.1% among the SWF intervention group and 73.2% among the Standard intervention group. In terms of substance-related outcomes, both groups reported significant decreases in the number of days using alcohol and other drugs between baseline and 3- and 6-month follow-ups - there were no statistically significant differences between the SWF intervention group and the Standard group at either of the two follow-up assessments. Violent victimization outcomes were also examined for intervention group effect. The SWF intervention was significantly more effective in reducing sexual violence at the 6-month contact, with participants in this condition nearly two times more likely than Standard intervention participants to report a decrease in sexual abuse=victimization (OR 1.89, 95% CI 1.11, 3.23, p<.02). The SWF intervention is unique in that it was developed through a collaborative process that elicited significant input on the content of the intervention from the target population of sex workers themselves. Prior to the initiation of the study, a series of focus groups was conducted with 53 active and former sex workers to better understand the issues most relevant to HIV prevention among this population, including drug use and sexual activity. One important example of the intervention content derived from these focus

	groups is the role of violent victimization in exacerbating women's risk for HIV. An issue raised frequently in these groups was the regularity with which sex workers encountered physical and sexual violence—in fact, it was considered a ''hazard of doing business on the street.'' As a result, the SWF intervention protocol was designed to include strategies for averting potentially dangerous situations. In spite of the positive impact demonstrated by the SWF intervention, significant differences from the Standard intervention were achieved on only a small number of key outcomes and only at the 6-month contact (1.6 times more likely than women in the Standard intervention to decrease unprotected oral sex and were 1.9 times more likely to report decreased sexual victimization). Although it was hypothesized that the SWF protocol would produce more robust differences in a number of domains, it is not unexpected that the Standard intervention produced behavioral change. Prior research has demonstrated that the NIDA protocol is a powerful intervention for drug-using populations (Wechsberg et al., 2004). key components were the use of peer interventionists and the supportive environment of the intervention center. Because both interventions were delivered by peers and both took place within the same safe and nonjudgmental setting
Implications of findings/ conclusions for treatment and research	This study documents that participation in a tailored HIV risk-reduction intervention can be effective in reducing drug use and sexual risk behaviors as well as violent victimization among this group of highly vulnerable women. Women in the SWF intervention were 1.6 times more likely than women in the Standard intervention to decrease unprotected oral sex and were 1.9 times more likely to report decreased sexual victimization. Although the precise reason for this pattern of effects is unclear, the significant 6-month outcomes may indicate that the targeted message of the SWF intervention had a longer-term impact than the traditional message of the Standard intervention. Because the SWF intervention message was tailored in its content, language, and style, it may have been perceived to be more salient by the target population. In spite of the positive impact demonstrated by the SWF intervention, significant differences from the Standard intervention were achieved on only a small number of key outcomes and only at the 6-month contact. Although it was hypothesized that the SWF protocol would produce more robust differences in a number of domains, it is not unexpected that the Standard intervention produced behavioral change. Prior research has demonstrated that the NIDA protocol is a powerful intervention for drug-using populations (Wechsberg et al., 2004). The lack of robust intervention effects between the SWF and Standard conditions suggests that other aspects of intervention participation may be important for achieving risk reduction. Look at peer interventions/facilitators – Non-judgemental staff and building trust is essential to good outcomes
Limitations of research	Although the data presented here are drawn from a large sample, the study participants may not be representative of all street-based sex workers in Miami. Recruitment was targeted to certain neighbourhoods and geographical districts where drug-using sex workers were most visible; therefore, a random sample of sex workers was not achieved. As such, the findings reported here may not be generalizable to other populations of sex workers. In addition, tapping into a population of highly marginalized sex workers created unique challenges with follow-up tracking; as a result, study attrition was considerable. A final limitation relates to the use of self-report measures of HIV risk behaviour
Relevance to review aims	Partly. Main focus is on HIV reduction- though substance reduction is discussed

Record	57
Author/s	An-Pyng Sun
Title	Program factors related to women's substance abuse treatment retention and other outcomes: A review and critique
Journal and page numbers	Journal of Substance Abuse Treatment 30 (2006) 1– 20
Year of publication	2006
Country where research took place	Nevada, US
Recruitment site	Thirty-five studies (see Table 1) were located through a search of citations in six databases and a screen of article reference lists. The six databases were PubMed of the National Library of Medicine, Social Work Abstracts, Sociological Abstracts, Social Services Abstracts, PsycInfo, and ERIC.
Sample description	A systematic review of 35 empirical studies that included solely women subjects or that analyzed female subjects separately from male subjects revealed five elements related to women's substance abuse treatment effectiveness
Design and methods	systematic review This review focused only on program factors. Thirty-five studies were selected for review based on the following criteria: (1) an empirical study (quantitative or qualitative); (2) only women were included in the study or women were analyzed separately from men; (3) a focus on evaluating treatment outcome (e.g., reduced AOD use, obtaining and maintaining employment improved emotional status, lower incidence of criminal behavior) and/or retention1; and (4) targeting treatment program factors and characteristics.
Analysis	With the use of content analysis methods, we identified five types of studies: (1) single- versus mixed-sex programs; (2) residential versus intensive outpatient/day treatment versus traditional outpatient treatment; (3) provision versus no provision for child care; (4) case management and/or a bone-stop shoppingQ model; and (5) supportive staff and provision for individual counseling. Within each of these categories, the studies were evaluated based on six methodological factors that were thought to be important for a study's ability to detect a causal relationship, to provide findings that might generalize to the wider women's population, and to be replicated by other researchers. These methodological areas included randomization; type of control condition; ability to disentangle multiple conditions, standard definition for treatment factors, and outcomes; sample size; program description; and statistical analyses.
Key findings (relevant to the project)	Suggestions for best practice for women as dictated from the systematic review. Suggestions derived from directly from the review for potentially effective program planning and practices with substance-abusing women: 1. Women-only programs are still scarce and policymakers must make such programs more available to women. 2. Agency administrators and practitioners should make women-only groups available as an option if a program is unable to take only women. 3. When referring a woman, particularly one with few resources and heightened environmental stress, practitioners should keep in mind that a residential program is likely

	to have a more solid and long-lasting effect on her recovery. Thus, the current American Society of Addictions Medicine's least restriction patient placement criteria and managed care rules must be tempered by the philosophies that many women may need first care instead of aftercare and habilitation instead of rehabilitation and that treatment intensity enhances treatment retention. 4. Policymakers and administrators should consider child care and other services onsite as being an optimal treatment for women. Case management with the availability of community services is a potentially viable alternative. 5. Administrators and practitioners must emphasize a nonjudgmental and non-confrontational approach in working with women and provide women with individual counselling in addition to group counselling.
Implications of findings/ conclusions for treatment and research	**See above** **Further questions to be answered by future research**: 1. A single-sex treatment may show better outcomes/retention than a mixed-sex treatment, but what are the specific ingredients of the treatment and therapeutic issues during women-only treatment that actually produce the better outcomes? 2. Case management service may be generally seen as beneficial from this review, but case management encompasses a wide range of services and intensities. Which of its particular features/processes actually contribute to outcome change? 3. Does the counsellor's supportiveness and the quality of client–counsellor interaction matter more than the treatment contents or services provided? 4. Finally, to what degree does aftercare or continuing care affect post-discharge outcomes?
Limitations of research	One limitation of this review is a potential bias owing to its being based only on published studies from peer-reviewed journals. Often, a positive (hypothesis was confirmed) study is more likely to be accepted for publication in such journals
Relevance to review aims	Partly although focus is not sex workers. This review does not look at groups of people (ie sex workers) within those abusing substance, but look at the whole population – this needs to be considered when adapting substance abuse treatment for sex workers.

Record	58
Author/s	Taylor
Title	The sexual victimization of women: Substance abuse, HIV, prostitution, and intimate partner violence as underlying correlates
Journal and page numbers	Do not yet have the article.
Year of publication	
Country where research took place	
Recruitment site	
Sample description	
Design and methods	
Analysis	
Key findings (relevant to the project)	
Implications of findings/ conclusions for treatment and research	
Limitations of research	
Relevance to review aims	

Record	59
Author/s	Joan S. Tucker, Suzanne L. Wenzel, Daniela Golinelli, Annie Zhou, Harold D. Green
Title	Predictors of substance abuse treatment need and receipt among homeless women
Journal and page numbers	Journal of Substance Abuse Treatment, 40, 287–294
Year of publication	2011
Country where research took place	Los Angeles, US
Recruitment site	central region of Los Angeles County, CA. Women were sampled from a diverse array of temporary shelter settings in the area that served a majority of homeless residents. We excluded facilities serving only minors or only men, domestic violence shelters, single-room occupancy and board-and-care hotels, facilities whose population was not majority homeless, and facilities whose average resident length of stay was more than 1 year.
Sample description	273 homeless women who screened positive for past-year substance abuse Women were recruited between June 2007 and March 2008 for a study examining the social context of alcohol use and HIV risk among women living in temporary shelter settings. Women were eligible if they were at least 18 years old and had sexual intercourse with a male in the past 6 months. We excluded facilities serving only minors or only men, domestic violence shelters, single-room occupancy and board-and-care hotels, facilities whose population was not majority homeless, and facilities whose average resident length of stay was more than 1 year. Women were drawn from 52 eligible facilities and selected by means of a stratified random sample, with shelters serving as sampling strata. A strict proportionate-to-size (PPS) stratified random sample would have been overly burdensome on the larger facilities. Thus, small departures were made from PPS and corrected with sampling weights.
Design and methods	We hypothesized that both perceived need and receipt of treatment would be less likely among homeless women with social networks that were less dense, more street based, and contained a higher proportion of substance users. Conversely, we expected that perceived need and receipt of treatment would be more likely among women with a higher proportion of network members who provided them with advice or information to help them solve their problems. Individual computer-assisted, face-to-face structured interviews, which lasted an average of 75 minutes, were conducted with 445 women by trained female interviewers. Women were paid $20 for their participation. The analytic sample for this study is restricted to 273 women who screened positive for past-year drug abuse (i.e., a score of 3 or higher on the 10-item Drug Abuse Screening Test; Skinner, 1982) or past-year alcohol abuse (i.e., a score of 8 or higher on the Alcohol Use Disorders Identification Test[AUDIT];
Analysis	The small departures we made from a strict PPS random sampling technique, and differential nonresponse rates required the use of design and nonresponse weights to represent the target population from the sample of respondents. All analyses incorporate these weights and account for the modest design effect that they induce, using the linearization method (Skinner, 1989). There is a small amount of missing data for some variables (generally b3%), which was accounted for largely by mean value imputation. For the main analyses, we first examined the bivariate associations of each predictor

	variable with the two outcomes of interest. Those predictor variables that were associated with a particular outcome at p b .10 were included in the multivariate model (Hosmer & Lemeshow, 1989).
Key findings (relevant to the project)	Having a street-based network may be indicative of disaffiliation—the lack of supportive ties that some have suggested plays a key role in preventing homeless adults from obtaining needed treatment Children posed a significant barrier to receiving substance abuse treatment It may be the case that **homeless women access mental health treatment for their substance abuse-related problems**, as previous research has suggested (Weisner & Schmidt, 1992), or that the **lack of integration of mental health and substance abuse services makes it difficult** for homeless women **to access both types of treatment simultaneously.**
Implications of findings/ conclusions for treatment and research	Integrated services provision There may be some parallels between homeless women and prostitutes in relation to substance misuse and access of services though caution needs to be taken in assuming the needs are similar.
Limitations of research	Paper does not screen for sex work/prostitution in relation to substance abuse and homelessness. Some of exclusion criteria regarding where the sample was recruited possibly should have been included in the study (DV shelter, single room occupancy) or explaination as to why they were not included.
Relevance to review aims	No. Focus is on homelessness, not sex work or recovery from substance abuse.

Record	60
Author/s	Louisa M.C. van den Bosch and Roel Verheul
Title	Patients with addiction and personality disorder: treatment outcomes and clinical implications
Journal and page numbers	Current Opinion in Psychiatry, 20:67–71
Year of publication	2007
Country where research took place	n/a
Recruitment site	Discussion Paper
Sample description	n/a
Design and methods	Purpose of review - The present review examines the outcomes of treatments focusing on substance abuse, on personality disorders, and on both the foci simultaneously. Clinical guidelines for the treatment of dually diagnosed patients are described. Studies will be discussed according to the point of departure they take in examining the treatment of dually diagnosed patients: pharmacotherapy, substance abuse, personality disorders, and dual focus treatments.
Analysis	
Key findings (relevant to the project)	
Implications of findings/ conclusions for treatment and research	
Limitations of research	Does not mention prostitutes/sex workers
Relevance to review aims	No

Record	61
Author/s	Agnes van der Poel, Cas Barendregt & Dike van de Mheen
Title	Drug Users' Participation in Addiction Care: Different Groups Do Different Things
Journal and page numbers	Journal of Psychoactive Drugs, 38:2, 123-132
Year of publication	2006
Country where research took place	Rotterdam, Netherlands
Recruitment site	Rotterdam Drug Monitoring System (OMS): an information and observation system which continuously collects information on drugs, drug use and drug-related phenomena and problems in Rotterdam. The OMS studies a specific group of drug users, namely those who use heroin, crack and other drugs on at least 20 days per month for at least several months.
Sample description	201 drug users categorised into four groups: (1) those with contact only with treatment agencies : the treatment group (19%); (2) those with contact only with care agencies : the care group (18%); and (3) those with contact with both agencies: the treatment and care group (49%). These three groups comprise 173 respondents who reported contact with treatment and/or care agencies. The remaining 28 respondents reported no contact with either kind of agencies, and is referred to as the neither treatment nor care group (14%). 69% male, 20% generation of income through prostitution in the past month, 88% daily heroin use (>20 days/month). 80% daily cocaine use (>20 days/month) n = 186 heroin users, n=185 crack users.
Design and methods	Investigates the differences and similarities between drug users in four addiction care conditions (only treatment agency, only care agency, both treatment and care, and neither treatment nor care) . Results will be discussed within the framework of the Stages of Change Model (Prochaska, DiClemente & Norcross 1992). quantitative data from the periodic survey among drug users which was carried out in September and October 2000 - sampled respondents throughout the city of Rotterdam by means of targeted and snowball sampling
Analysis	presented as frequencies (counts, averages, medians and means). Differences are tested with chi-square test (categorized variables), with 95% confidence intervals. Multivariate discriminant analysis was performed to explore what characteristics and variables are discriminative for the four groups.
Key findings (relevant to the project)	Income generated through prostitution was most prevalent in the care group. This is due to the fact that all but one of the females in the care group earned income through prostitution and visited a low threshold shelter for female drug prostitutes (located in the prostitution zone). The second discriminant function contains prostitution, health situation, contact with youth welfare work, illegal activities, and age of initiation of heroin and/or crack use; this function addresses issues of income-generating activities and health. It shows a positive relation between working as a prostitute and self-reported good health. Earlier research also connects working as a prostitute with self-reported good health (Vitale & Wits 2003).

	It is plausible that the health perception of prostitutes is crack-induced: even though objectively their health situation is relatively bad, using crack makes them feel good. Perceived good health and illegal activities (especially prostitution) are more prevalent in the neither treatment nor c are group than in the treatment group.
Implications of findings/ conclusions for treatment and research	Early interventions by accessible care agencies are of utmost importance in the prevention of prolonged homelessness. The same probably applies to street prostitution.
Limitations of research	Not relevant for the purpose of this review
Relevance to review aims	No. Focus not on recovery.

Record	62
Author/s	Ward
Title	Assessing the effectiveness of a trauma-oriented approach to treating prostituted women in a prison and a community exiting program
Journal and page numbers	Journal of Aggression, Maltreatment & Trauma, 18:293–312,
Year of publication	2009
Country where research took place	Phoenix, Arizona, USA
Recruitment site	The participants in this study were 29 women who self-identified as having prostituted and were from multiple locations. One group (*n* = 11) resided in a residential exiting program for prostitutes and the other group participants (*n* = 18) were in a moderate-security prison. Both groups were provided with the Esuba 12-week psychoeducational intervention addressing trauma and abuse issues. Groups were offered for 2 hours each week for 12 weeks and were led by trained social work or criminology students under the supervision of a doctoral student and a clinical social worker. For the purposes of simplicity, the groups will be referred to as "the prison group" and "the community group." Research data were included in the study only on those participants who completed the entire 12-week program. THE PRISON GROUP The participants in the prison group were a sample of 18 women who identified as prostitutes from a larger group of voluntary participants in the Esuba group. The sample answered "yes" to any questions regarding consent to "perform a sexual act, including sexual intercourse, oral or anal contact or sodomy, for money, drugs, jewelry, clothing, a place to stay, protection, or other items" on one of the study's surveys. The prison group was provided at a prison in a large southern state and was a closed group of voluntary participants. Originally there were 21 prostitutes in the prison group; however, three did not complete the program due to being transferred to another prison, being placed in confinement, or receiving an early release. Participants' ages in the prison group ranged from 19 to 45 (*M* = 30.89, *SD* = 7.90). Participants from the prison group were White (*n* = 11, 61.1%), African American (*n* = 6, 33.3%), and Hispanic (*n* = 1, 5.6%). THE COMMUNITY GROUP The community group members were women who resided at a community based prostitution exiting program in a large metropolitan area in the southwestern United States. There were 11 participants in the community group who completed the 12-week group intervention in the exiting program. At the start of the group intervention, there were 19 participants. However, there were eight participants who did not complete the program for reasons such as leaving the residential facility, going to prison, or transferring to another program. The community groups' ages ranged from 22 to 42 (*M* = 36.73, *SD* = 5.61). The community group participants were all White. Institutional Review Board approval was received and informed consent was given by all participants at the first meeting. Confidentiality was discussed before administering the assessments and participants were assured that their responses would remain anonymous. All participation was voluntary, with inmates and community members signing up to participate in the group and completing the questionnaires and surveys. Prison and community group members were not penalized for not participating.
Sample description	Twenty-nine women participated in a 12-week psychoeducational trauma and abuse intervention program called Esuba.

Design and methods	A quasi-experimental research design was used. The purpose of this study is to explore the effectiveness of a group trauma and abuse intervention for prostituted women from two settings, prison and a community exiting program. Some programs have been identified as therapeutic interventions for prostitutes; however, few are empirically based interventions. One that has been studied, Esuba: Women Helping Women Turn Abuse Around, is a therapeutic intervention for women who have been victimized and traumatized. We have chosen to use this program in the current study. Esuba was developed specifically for incarcerated women in 1990 by two social workers (Bedard, Pate, & Roe-Sepowitz, 2003). The specific need to bring the Esuba program to prostitutes was noticed in a prison where a large number of women with a history of prostitution were voluntarily attending the groups. The Esuba program was brought to the Southwest in 2006 and expanded to a residential treatment facility for women exiting prostitution. The Esuba program is a psychoeducational therapy group designed to heighten awareness of abuse and violence while teaching anger management and communication skills (Bedard et al., 2003). It teaches women about the effects of abuse while encouraging discussion and sharing of experiences to decrease isolation, shame, and fear, as well as development of social support and more adaptive social skills. This program is divided into 12 sections with a different topic being offered each week. Topics include an introduction to the Esuba program, stereotypes about violence and abuse, cultural and historical abuse, sexual abuse, domestic violence, partner abuse, child abuse, elder abuse, identifying differences between perception and reality, self-abuse, letting go of the past in order to move toward the future, and summary/graduation (Esuba Manual, 2006). This study will evaluate and compare the effectiveness of Esuba for two samples of female prostitutes, one in the community and the other in prison. The Esuba program follows Herman's (1992) stages of trauma recovery by (a) emotional and physical safety; (b) remembrance and mourning; and (c) reconnection. Herman's model emphasizes relational connections. Esuba promotes this well-accepted treatment model by facilitating relationships between survivors and a group facilitator, creating a safe environment to share their experiences, encouraging acceptance of the past, and movement toward the future The Esuba program consists of 2-hour meetings for 12 consecutive weeks. The format is psychoeducational, with leaders presenting information such as statistics about abuse, definitions of sexual abuse, scenarios of abuse, and statutes that define what is criminal abuse (specific for each state). Group size is limited to 20, with all members volunteering to attend. All members are encouraged to participate, but are not required to. A graduation certificate is provided for all members at the last session.
Analysis	Data were collected in two different states from the two groups during the same time period in spring 2006. The TSI was administered during the first group meeting and again at the last group meeting of both groups in order to compare the responses before and after the group intervention.
Key findings (relevant to the project)	All participants reported decreases in trauma symptoms, but the prison group showed a greater number of significant changes in trauma symptomology than the community group.
Implications of findings/ conclusions for treatment and	It offers information on the specific types of trauma-related problems and treatment needs of this population. It is essential for mental health providers to recognize that prostituted women in both prison and community settings display significant levels of trauma symptoms that should be addressed as part of their treatment plan. This is the first step in the recommended interventions for prostituted women as outlined

research	by Hedin and Månsson (2004), who identified three components of working with women exiting prostitution: (a) working through their traumatic experiences, (b) repairing and remastering previous close relationships, and (c) building a new social network. The group intervention provided in this study address two of these components: working through their traumatic experiences by means of detailed descriptions and self-reflection of the traumatic experiences by the participants and by providing a safe and supportive social network within which they receive both clinical feedback from the leaders and reflections and support such as "you are not alone in your experiences" from the other participants. The active mechanisms of change appears to be reframing and destigmatizing the traumatic experiences through detailed descriptions in front of a supportive group of peers and therapeutic leaders along with the active participation in a group bearing witness to the experiences of others. These findings indicate that mental health clinicians should become increasingly skilled at working with traumatized clients and developing programs with the goal of assisting their clients in addressing and externalizing their traumatic experiences, thus hopefully decreasing trauma-related symptoms. In most settings, including homeless and domestic violence shelters, prisons and jails, and substance abuse treatment centers, mental health clinicians do not ask about a woman's experience with prostitution, thus avoiding their obligation to providing services to address prostitution issues and related trauma symptoms (Stark & Hodgson, 2004). Drawing attention to the trauma symptoms and mental health problems of prostituted women through screening in these settings may contribute to mental health professionals recognition of the pervasiveness of prostitution and the severity of the mental health impact, and how, without resolution, mental health problems will prevent prostituted women from gaining "legal" employment, supporting and attaching to their children, and contributing positively to their community.
Limitations of research	It is unknown what other types of services the participants were receiving at the time of the Esuba intervention. The prison group had limited access to substance abuse treatment groups, alcohol and drug support groups, and individual counseling. The women in the community group were receiving other forms of treatment, such as Alcoholics Anonymous, Prostitution Anonymous, Narcotics Anonymous, and individual therapy along with the Esuba group. However, whether they were receiving other services and what particular programs they were participating in varied across individuals. The women in the community group were receiving these services before they started the Esuba program; therefore it is possible that there were some improvements in trauma symptom levels already made before the participants began the Esuba program.
Relevance to review aims	Partly. Focus on trauma not on recovery.

Record	63
Author/s	Wechsberg
Title	Substance abuse, treatment needs and access among female sex workers and non-sex workers in Pretoria, South Africa.
Journal and page numbers	Substance Abuse Treatment, Prevention, and Policy, **4**:11
Year of publication	2009
Country where research took place	Pretoria, South Africa
Recruitment site	Study participants were recruited over a 3-year period (June 2004 to June 2007) in Greater Pretoria, which includes the central business district, nearby residential areas, and surrounding townships. A variety of methods (e.g., street-based outreach, fliers, and peer advocates) were used to recruit participants from target communities and areas known for illicit drug activity and sex work, including daily rate hotels, informal settlements, weekly apartment dwellings, and shelters that were identified into sampling zones. Eligibility criteria for the study included the following: being female, at least 18 years of age, reporting alcohol use on at least 13 of the past 90 days, reporting either trading sex for money or drugs in the previous 90 days or having unprotected sex in the previous 90 days, providing written consent to participate, and providing verifiable locator information for Gauteng Province.
Sample description	Women who reported alcohol use and recently engaging in sex work or unprotected sex were recruited for a randomized study. The study sample (N = 506) comprised 335 FSW and 171 female non-SW from Pretoria and surrounding areas. Self-reported data about alcohol and other drug use as well as treatment needs and access were collected from participants before they entered a brief intervention.
Design and methods	cross-sectional data collected from substance-using female sex workers (FSW) and non-sex workers (non-SW) in Pretoria, South Africa, who entered a randomized controlled trial
Analysis	Descriptive analyses were conducted on the complete sample and chi-square tests were conducted to determine the difference in demographics, socioeconomic status, history of abuse, family history of substance abuse, HIV testing and status, and substance use characteristics between the two groups of FSW and non-SW. Logistic regression models were used to identify the characteristics associated with past-year (recent or active) alcohol and other drug abuse disorders. Finally, the analysis examined whether the FSW were different from the non-SW in self-perceived substance use problems, use of substance abuse treatment, and perceived need for treatment.

Key findings (relevant to the project)	As compared with female non-SW, FSW were found to have a greater likelihood of having a past year diagnosis of alcohol or other drug abuse or dependence, having a family member with a history of alcohol or other drug abuse, having been physically abused, having used alcohol before age 18, and having a history of marijuana use. In addition, the FSW were more likely to perceive that they had alcohol or other drug problems, and that they had a need for treatment and a desire to go for treatment. Less than 20% of participants in either group had any awareness of alcohol and drug treatment programs, with only 3% of the FSW and 2% of the non-SW reporting that they tried but were unable to enter treatment in the past year.
Implications of findings/ conclusions for treatment and research	FSW need and want substance abuse treatment services but they often have difficulty accessing services. The study findings suggest that barriers within the South African treatment system need to be addressed to facilitate access for substance-using FSW.
Limitations of research	Not relevant to review aims
Relevance to review aims	No. Focus not on recovery.

Record	64
Author/s	Wendee M.Wechsberg,Winnie K. Luseno, Wendy K.K. Lam, Charles D.H. Parry, and Neo K. Morojele
Title	Substance use, sexual risk, and violence: HIV prevention intervention with sex workers in Pretoria
Journal and page numbers	AIDS and Behavior, Vol. 10, No. 2, DOI: 10.1007-s10461-005-9036-8
Year of publication	2006
Country where research took place	Pretoria, South Africa
Recruitment site	A targeted sampling plan was used to balance recruitment communities, and field staff worked in teams with local outreach workers to recruit study participants. A number of barriers to conducting outreach, recruiting, and re-contacting substance abusing sex workers were revealed during the study, including police presence, gatekeepers at the daily hotels (e.g., security guards and madams), and general mistrust.
Sample description	93 sex workers (mean age 24 years), 67% of the women reported having at least one current STI symptom This study focused on women who conducted sex work in daily-rate hotels, apartments, and informal settlements; however, women who were homeless and working the city streets of Pretoria were also recruited. Eligibility criteria included self-identifying as a Black South African woman, aged 18 years or older, either having a positive urine test for cocaine or self-reporting weekly cocaine use during the past 90 days, engaging in active sex work in the past 90 days, having multiple sex partners, and providing informed consent. For eligible participants, staff made appointments and arranged transportation to and from the field site. At the field office, informed consent was obtained for study participation and separate consents were obtained for service referrals after the intervention.
Design and methods	pilot tested an adapted HIV prevention intervention for women in south Africa = two-session intervention Using an experimental design, 93 women who reported recent substance use and sex trading were randomly assigned (no details given) to a modified Standard HIV intervention or to a Woman-Focused HIV prevention intervention. Eighty women completed the one-month follow-up interview. In addition, in-depth interviews and focus groups were conducted with service providers, researchers, and female sex workers who were active substance abusers. These activities were conducted to better understand risk behaviors and determine innovative ways to address these behaviors within a South African woman's life context. Women followed up one month The modified Standard HIV intervention consisted of two private one-hour educational and skills building sessions held within two weeks. During both sessions, the interventionist used cue cards to provide information on HIV; drug and sexual risks; risk reduction methods including proper use of male and female condoms; how to talk with a partner about safer sex practices; the HIV antibody test; and steps that participants should take to prevent the spread of HIV. The interventionist also demonstrated and rehearsed proper condom use, and gave each participant a risk-reduction and toiletry kit

	as well as information on referral resources. The Woman-Focused intervention presented the same information as the Standard intervention but in addition, it addressed HIV/AIDS issues facing women in South Africa as identified in the focus groups and CAB meetings. It included a more personalized assessment of each woman's drug and sexual risks that informed specific goals to help each woman negotiate risk-reduction by communicating the importance of condom use with sex partners. The women also learned violence prevention strategies such as staying sober to assess the situation, communication techniques in difficult situations, and ways to exit a volatile situation if need be. Women were also shown how to actively seek community resources.
Analysis	Descriptive statistics were compiled on participants' demographic characteristics, sexual behavior, substance use, and experiences of violence. Bivariate analyses were conducted to compare pre and post intervention effects within each group (i.e., the Woman-Focused group and the Standard group). Specifically, statistical significance of changes in dichotomous variables (e.g., condom use, and alcohol and crack cocaine use) were assessed using the McNemar test, and changes in continuous variables (e.g., number of STI symptoms) were assessed with paired t-tests. Logistic regression analysis controlling for baseline was used to examine intervention group effects on daily alcohol and cocaine use outcomes.
Key findings (relevant to the project)	Overall, the proportion of women who reported having any unprotected sex with paying clients or with boyfriends decreased from baseline to follow-up, with greater reductions in the Woman-Focused group. Overall, a decrease was observed in the daily use of alcohol and cocaine from baseline to follow-up. A reduction from 15% to 5% was observed in the proportion of women reporting daily alcohol use in the Woman-Focused group compared with the smaller decrease of 18% to 10% in the Standard group. Both intervention groups showed similar reductions in the proportion of women reporting daily cocaine use: 64% to 33% for the Woman-Focused group and 75% to 40% for the Standard group. In a logistic regression model that adjusted for baseline alcohol use, Woman-Focused group participants were less than half as likely as women in the Standard group to report daily alcohol use at followup (OR = 0.46; 95% CI = 0.07, 2.90). In a similar model that adjusted for daily cocaine use at baseline, Woman-Focused group participants were slightly less likely to report daily cocaine use at follow-up than women in the Standard group (OR = 0.86; 95% CI = 0.31, 2.43). Violence continued to be a serious problem at one-month follow-up, with 22% of the women reporting being beaten by a boyfriend, 32% reporting being beaten by a client, and 19% reporting being robbed during the previous month. Additionally, 14% of the women reported being raped by a client, 5% reported being raped by a boyfriend, and 4% reported being gang raped. Although violence continued to be a problem,Woman-Focused group participants reported being victimized less often than women in the Standard group (mean 4.5 vs. 6.3; d=−0.28) at follow-up.
Implications of findings/ conclusions for treatment and research	In summary, this pilot presents important changes in substance use and condom use after one month that suggest reduced HIV risk. However, a larger study with extended follow-up is in order.
Limitations of research	Focus on HIV, short term follow up
Relevance to review aims	Partly. Focus on HIV

Record	65
Author/s	Teresa Whitaker, Paul Ryan and Gemma Cox
Title	Stigmatization Among Drug-Using Sex Workers Accessing Support Services in Dublin
Journal and page numbers	Qualitative Health Research, 21(8) 1086–1100
Year of publication	2011
Country where research took place	Dublin, Ireland
Recruitment site	Access to this group was through specialist agencies (drug treatment and homeless services, and services providing health treatment for sex workers). Agency workers approached drug-using sex workers and asked them if they would like to participate in the research; if they agreed, the researchers were contacted. To improve participation, posters and postcards containing information about the study were placed in all the drug treatment agencies in Dublin city center. Some respondents contacted the researchers independently. Interviews were conducted in a variety of social settings, including an agency, a respondent's car, the office of the NACD, prison, a shopping center, and a pub.
Sample description	35 qualitative interviews with drug users who were engaging in or who had engaged in sex work in Dublin,Ireland To be eligible for inclusion, all respondents had to be over the age of 18 years, and had to self-identify as a problematic drug user in that their drug use caused them social, psychological, physical, or legal difficulties. Respondents also were required to be currently engaged in sex work or have exited sex work after a sustained period of involvement. The sample of drug-using sex workers interviewed in this study was comprised of 31 women and 4 men, 3 of whom self-identified as being gay. The average age was 32 years (median age = 29 years). All were White, indigenous Irish people; the majority from Dublin.
Design and methods	Purposive sample A qualitative methodological approach to explore the micro-risk environment within which problematic drug using sex workers in Dublin live and work, because qualitative methods focus on the meanings, perceptions, processes, and contexts, and offer ways of understanding drug use and responses
Analysis	All interviews were audiorecorded and subsequently transcribed. We immersed ourselves in the data by listening to the tapes and reading the transcripts repeatedly. Recurring themes were identified and interpreted.
Key findings (relevant to the project)	The majority of respondents (*n* = 30) were on methadone treatment; they were asked about their other drug use in the 90 days prior to the interview. Self-reported drug use was high among this group: 24 reported using street methadone, 22 used heroin, 16 took nonprescription benzodiazepines, 12 used cannabis, 10 used cocaine, and 5 used crack cocaine. All participants had a history of injecting drug use, and more than half the sample had injected in the previous 90 days; most were polydrug users. because of a result of felt stigma and internalized shame, they tried to hide their drug use, thus endangering their own lives. This group carried multiple layers of stigma because of sex work, drug use (including injecting drug use), and having contracted

	human immunodeficiency virus (HIV) or hepatitis C virus (HCV). This stigma was powerfully reinforced by the language routinely used by health professionals. To improve the effectiveness of harm reduction interventions, it is recommended that service providers change their language, in particular in recognition of the human dignity of these clients, but also to help attract and retain drug users in services, and to help reduce the unacceptable mortality levels among drug users.
Implications of findings/ conclusions for treatment and research	n/a
Limitations of research	n/a
Relevance of review aims	No. Focus not on recovery