

Contraception and Clean Needles: Feasibility of Combining Mobile Reproductive Health and Needle Exchange Services for Female Exotic Dancers

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Young women engaged in exotic dancing have a higher need for reproductive health services than women not in this profession, and many also use drugs or exchange sex for money or drugs. Few report receiving reproductive health services. We describe a public health, academic, and community partnership that provided reproductive health services on needle exchange mobile vans in the “red light district” in downtown Baltimore, Maryland. Women made 220 visits to the vans in the first 21 months of the program’s operation, and 65% of these visits involved provision of contraception. Programmatic costs were feasible. Joint provision of needle exchange and reproductive health services targeting exotic dancers has the potential to reduce unintended pregnancies and link pregnant, substance-abusing women to reproductive care, and such programs should be implemented more widely. (*Am J Public Health*. 2012;102:1833–1836. doi:10.2105/AJPH.2012.300842)

dancers and their need to engage in higher risk sex work to obtain money for drugs. Rates of HIV and other sexually transmitted infections (STIs) are high among sex trade workers, as are rates of unwanted pregnancies.⁵ Exotic dancers differ from other sex trade workers because of the club environment, which can be an additional protective or risk factor as a result of the combination of legal and illegal sex trade work that can occur there.³ Targeted health services for women engaged in exotic dancing may be vital to reaching them.⁹ We assessed a public health intervention designed to provide reproductive health care for exotic dancers in downtown Baltimore.

NEEDS ASSESSMENT

Baltimore City Health Department (BCHD) staff operating a needle exchange in a downtown part of the city with a concentration of exotic dance clubs (i.e., the “red light district”) had become concerned about unmet reproductive health needs. One woman had a pregnancy diagnosed in the third trimester, and there were numerous requests for pregnancy tests. A baseline survey of 71 women using needle exchanges in the area, three fourths of whom indicated that they were exotic dancers, revealed that 75% were not

YOUNG WOMEN ENGAGED IN

exotic dancing have an increased need for reproductive health services relative to women in other professions. Most exotic dancers are in their early 20s, a period in which women are at high risk for unplanned pregnancies,¹ and many dancers are also engaged in high-risk activities that increase their chances of unplanned pregnancies and poor pregnancy outcomes. In a recent study, 61% of dancers in downtown Baltimore, Maryland, reported having ever sold sex and 43% reported having sold sex in the preceding three months in the club at which they were employed.² Drug use was also common; 57% of dancers reported that they had recently used drugs, often crack cocaine or heroin.³

Despite their risks, exotic dancers are a rarely studied subset of sex trade workers.^{4–7} Similar to other sex trade workers,^{4,8} there are concerns regarding overlapping sexual and injection networks among exotic

KEY FINDINGS

- Exotic dancers are a unique subset of sex workers and have rarely been studied.
- At baseline, 75% of women using needle exchange services in the Baltimore, Maryland, “red light district” were not receiving reproductive health services. Observations indicated that several women had late pregnancy diagnoses and were unfamiliar with their health care options.
- Mobile reproductive health services were feasible and affordable because they were integrated into needle exchange services and volunteers were used.
- The numbers of women served exceeded expectations, but few women were connected to a clinic for full reproductive exams despite referrals, next-day appointments, telephone reminders, and incentives.
- Forty-six percent of women returned for continuation of injectable contraceptives, and this rate increased over time.
- Five pregnant women were identified, and all were linked to desired pregnancy services.
- Joint provision of needle exchange services and reproductive health services to exotic dancers has the potential to reduce unintended pregnancies and link pregnant women to care, and such programs should be implemented more widely.

TABLE 1—Partnership Members and Services Provided to Women: Baltimore, Maryland, 2009–2011

Organizational Partner	Services Provided
Baltimore City Health Department, STD division, risk reduction services	Needle exchange services and organizational lead
Baltimore City Health Department, STD division, medical services	STD and HIV testing via mobile unit
Baltimore City Health Department, reproductive health services	Clinician salaries, reproductive health supplies, and immunizations
Baltimore Health Care Access	Health insurance and identification/birth certification assistance, linkage to care for pregnant women
Sisters Together and Reaching	STD and HIV testing via mobile unit
Johns Hopkins University	Volunteer health care providers, organizational support
University of Maryland	Volunteer health care providers, organizational support

Note. STD = sexually transmitted disease.

TABLE 2—Demographic Characteristics of Reproductive Health Program Clients: Baltimore, Maryland, 2009–2011 (n = 126)

Characteristic	Clients, No. (%)
Age, y	
< 18	2 (1.6)
18–20	36 (28.6)
21–24	43 (34.1)
25–29	27 (21.4)
30–39	14 (11.1)
≥ 40	3 (2.4)
Unknown	1 (0.8)
Race	
Black	90 (71.4)
White	33 (26.2)
American Indian/Alaskan Native	1 (4.7)
Other	2 (1.6)
Residence	
Baltimore City	92 (73.0)
Other Maryland county	29 (23.0)
Out of state	3 (2.4)
Unknown	2 (1.6)

Note. The majority of clients were exotic dancers, but employment information was not systematically collected. Clients with missing demographic information were not included in this table (n = 26).

currently receiving reproductive health care. Most were unaware of how to access affordable health care. Researchers from a concurrent study who conducted qualitative interviews with the exotic dancers working in the area validated the BCHD staff's concerns regarding unmet health care needs.^{2,3}

Barriers such as long waiting times, transportation challenges, cost, difficulty scheduling appointments, clinic hours, and discomfort with medical examinations discourage many sex trade workers from obtaining regular reproductive health care.^{10,11} Those who do seek care may not disclose their occupation,

and thus physicians may not be aware of their needs.^{11,12} Because these concerns were also apparent to BCHD staff, the department sought to integrate reproductive health services with the needle exchange.

PROGRAM DEVELOPMENT

Reproductive health services were incorporated into the weekly prevention outreach efforts of a public health partnership that involved public health, academic, and community-based organizations (Table 1). The partnership used 2 mobile vans, one owned by the health department and one by a community-based organization, to deliver reproductive health services. Female clients were recruited from the needle exchange program, inside the clubs, or on the street. Services were available one night a week from 7 to 10 PM, starting one hour before the work shift. Services were available to anyone, but hours, locations, and outreach were targeted to exotic dancers. Staff did weekly outreach inside the clubs to interact with known clients and inform others of services available.

The reproductive services offered included pregnancy testing, counseling regarding pregnancy

options, contraceptive counseling, and distribution of contraceptives. Available types of contraception included emergency contraception, injectable contraception, oral contraceptive pills, and condoms. As a result of space limitations, no medical exams were performed with the exception of blood pressure measurements. All women were referred for timely, low-cost, full reproductive health services. HIV testing and STI testing were offered. Women with acute health needs were referred to the emergency department. Maryland State Family Planning Program administrative guidelines were followed in offering services. Influenza, H1N1, hepatitis A, and hepatitis B vaccines were offered.

Clients were registered as BCHD patients, and records were kept in accordance with routine policies. Care was confidential, free, and in accordance with the Health Insurance Portability and Accountability Act (110 Stat 1936). Staffing services were provided by volunteers and health department clinical staff. Half of the clinicians were volunteers. The program grew as more health care professionals volunteered.

Quality assurance procedures were performed via chart reviews

TABLE 3—Services Provided Through the Reproductive Health Program: Baltimore, Maryland, 2009–2011

Service Provided	Visits, No. (%)
Any service	220 (100.0)
Return visits	72 (32.7)
Pregnancy test	166 (75.5)
Positive pregnancy test ^a	5 (3.0)
Contraception ^b	138 (62.7)
Depo-Provera	88 (63.8)
Oral contraceptive	46 (33.3)
Received prescription	5 (3.6)
Emergency contraception	23 (16.6)
Return visits for Depo-Provera ^c	
On time	26 (36.1)
Late ^d	7 (9.7)
Did not return	39 (54.2)

^aDenominator for percentage is number of visits at which a pregnancy test was administered.

^bDenominator for percentage is number of visits at which contraception was given.

^cClients whose next injection was not due at time of this report were omitted from calculations (n = 16). Because the program is ongoing, actual follow-up rates may be greater.

^dLate was defined as more than 2 weeks after injection was due.

and regular team planning meetings. Outcomes were tracked by BCHD and reviewed quarterly by the planning team. Outcome assessments for linkage to care were performed by reviewing BCHD records, given that the outreach records became part of the electronic clinic records.

EVALUATION

Table 2 presents the demographic characteristics of clients seen in the first 21 months of the program (October 2009 through June 2011). A total of 152 clients were seen in more than 220 visits (Table 3). Pregnancy testing was performed at 75% of visits, and 5 pregnancies were diagnosed. Sixty-three percent of the visits resulted in on-site administration of a contraceptive method. Depo-Provera accounted for 64% of the contraception provided; 46% of clients returned to the van for a second

Depo-Provera injection. The program is ongoing, so return rates may increase with time. The programmatic cost per client was \$85, which included clinician salaries and contraceptive supplies. Approximately three fourths of clients who provided information on their employment status reported that they worked in an exotic dance club. A few clients were street-based sex workers. Finally, some clients denied engagement in exotic dancing or sex work.

INTERPRETATION

The numbers of women served on the mobile vans exceeded expectations. The costs of the reproductive health program were minimized by integrating it into already-existing needle exchange and STI outreach programs. The additional medical and nursing staff necessary to run the program were almost entirely volunteer, which was

essential to the program's feasibility and modeled on other free clinics nationwide.¹³

As the program progressed, more women returned to the vans for follow-up services. Funding is being pursued to allow for more comprehensive services to be offered. Exotic dancers would benefit from more point-of-care screening. Future work should investigate barriers to linkages to care for this population. Few women were connected to a clinic for full reproductive exams despite next-day appointments, telephone reminders, and incentives. Case management to link women to reproductive services was initially integrated into the program, requiring an additional staff member, but this was stopped after several months of futile effort. Case management to link pregnant women to prenatal care and health insurance was successful for the few women requesting these services.

NEXT STEPS

The program continues to provide pregnancy tests and contraception on the mobile vans for female exotic dancers, and it has proved to be a feasible method to deliver care to women otherwise reporting very low service use. The program has obtained a larger van for comprehensive exams, and it will expand to more sites. Central to improving service to this population is investigation of barriers to care and adherence to contraception. Reproductive health services should be implemented more widely at needle exchange sites serving exotic dancers, and other needle exchange locations should be investigated to determine whether implementing

reproductive health care would be an effective use of resources. ■

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Contributors

E. Moore designed and implemented the study with C. Serio-Chapman and wrote the article. J. Han prepared and analyzed the data and led the literature search. C. Serio-Chapman originated and organized the study. C. Mobley supervised the study and assisted with data integrity. C. Watson supervised the study and prepared the cost analysis. M. Terplan supervised the analysis.

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Human Participant Protection

This study was approved by the institutional review boards of the Johns Hopkins University School of Medicine and the University of Maryland. Consent was waived because no identifiers were reviewed by the study team.

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