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A "Common Factors" Approach to Developing Culturally Tailored HIV Prevention Interventions

Jill Owczarzak, PhD[1], **Sarah D. Phillips, PhD**[2], **Olga Filippova, PhD**[3], **Polina Alpatova, MA**[3], **Alyona Mazhnaya, MS, MPH**[4], **Tatyana Zub, MA**[3], and **Ruzanna Aleksanyan, MS**[5]

[1]Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, USA

[2]Indiana University, Bloomington, IN, USA

[3]V.N. Karazin Kharkiv National University, Kharkiv, Ukraine

[4]National University of Kyiv-Mohyla Academy, Kyiv, Ukraine

[5]Medical College of Wisconsin, Milwaukee, WI, USA

Abstract

The current dominant model of HIV prevention intervention dissemination involves packaging interventions developed in one context, training providers to implement that specific intervention, and evaluating the extent to which providers implement it with fidelity. Research shows that providers rarely implement these programs with fidelity due to perceived incompatibility, resource constraints, and preference for locally generated solutions. In this study, we used the concept of "common factors," or broad constructs shared by most evidence-based HIV prevention interventions, to train service providers to develop their own programs. We recruited eight Ukrainian HIV prevention organizations from regions with HIV epidemics concentrated among people who inject drugs. We trained staff to identify HIV risk behaviors and determinants, construct behavior change logic models, and develop and manualize an intervention. We systematically reviewed each manual to assess intervention format and content and determine whether the program met intervention criteria as taught during training. All agencies developed programs that reflected common factors of effective behavior change HIV prevention interventions. Each agency's program targeted a unique population that reflected local HIV epidemiology. All programs incorporated diverse pedagogical strategies that focused on skill-building, goal-setting, communication, and empowerment. Agencies struggled to limit information dissemination and the overall scope and length of their programs. We conclude that training service providers to develop their own programs based on common elements of effective behavior change interventions can potentially transform existing processes of program development, implementation, and capacity building. Expanding this model will require committed training and support resources.

Corresponding Author: Jill Owczarzak, PhD, Department of Health, Behavior, and Society, Johns Hopkins Bloomberg School of Public Health, 624 N. Broadway, Hampton House Room 739, Baltimore, MD 21205-1996, USA. jillowczarzak@jhu.edu.

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Since the 1990s, the U.S. Centers for Disease Control and Prevention has spearheaded efforts to set evidence-based standards for best practices in HIV prevention and establish centralized diffusion of interventions that meet these standards (Dworkin, Pinto, Hunter, Rapkin, & Remien, 2008; Lyles, Crepaz, Herbst, & Kay, 2006). Through the Diffusion of Effective Behavioral Interventions (DEBI) program, prevention programs that meet the criteria for best-evidence behavioral interventions are manualized, packaged, and disseminated on a broader scale for providers to implement in their specific communities (Collins, Harshbarger, Sawyer, & Hamdallah, 2006). This and similar initiatives to disseminate evidence-based interventions (EBIs) often focus on helping service providers implement programs with fidelity to core elements (Eke, Neumann, Wilkes, & Jones, 2006; Peterson & Randall, 2006; Solomon, Card, & Malow, 2006). “Core elements” are integral components of the intervention thought to be responsible for its effectiveness and that must be retained in order for HIV risk reduction to occur (Helitzer, Peterson, Thompson, & Fluder, 2008; Zvoch, 2009).

While well-intentioned, this model of development and dissemination faces several problems. First, service providers rarely implement EBIs with fidelity. Frontline service providers frequently expand interventions to new populations, eliminate core elements, or reinvent interventions by combining them with other programs (Galbraith et al., 2008; Harshbarger, Simmons, Coelho, Sloop, & Collins, 2006; Owczarzak & Dickson-Gomez, 2011; Prather et al., 2006). These changes potentially render the intervention ineffective (Galbraith et al., 2008; Kelly, 2004). Agencies that participate in capacity-building programs continue to experience high rates of staff turnover, lack access to technical assistance resources, inconsistently evaluate and implement programs, struggle to recruit and retain intervention participants, and operate with limited resources while attempting to implement costly and complex interventions (Dworkin et al., 2008; Taveras et al., 2007; Veniegas, Kao, & Rosales, 2009; Veniegas, Uyen, Rosales, & Arellanes, 2009). At the same time, funding and capacity-building agencies, in partnership with service providers, spend significant resources taking interventions developed through research for one population and adapting and modifying them to fit new target populations (McKleroy et al., 2006). Finally, the length of time from development to dissemination to implementation is often very long, sometimes more than a decade (Somerville, Diaz, Davis, Coleman, & Taveras, 2006). By the time the intervention makes it to the field, many of the elements and materials may be out of date (Owczarzak & Dickson-Gomez, 2011) and the epidemiology may have shifted.

To address limits of existing models of intervention development and dissemination, we drew on the concept of common factors of effective HIV prevention interventions, as identified by Rotheram-Borus et al (2009), to provide nongovernmental organization (NGO) staff with the tools to develop their own HIV prevention programs. In contrast to intervention-specific core elements, numerous meta-analyses suggest that common factors

may be more central to diverse interventions' effectiveness (Albarracin et al., 2005; Herbst et al., 2005; Neumann et al., 2002). Common factors are broader constructs that support behavior change and are incorporated into a variety of EBIs. Generally, effective evidence-based prevention strategies are based on the idea that behavior change requires opportunities and practice and that change occurs over time (Rotheram-Borus et al., 2009). Successful HIV prevention interventions include a framework to understand HIV risk behavior and change; build cognitive, affective, and behavioral skills; foster sustainable social support; include tailored, behavior-specific content; and address environmental barriers to behavior change (Rotheram-Borus et al., 2009). Factors common to effective behavioral interventions can be organized into three domains: implementation, content, and pedagogy (Darbes, Crepaz, Lyles, Kennedy, & Rutherford, 2008; Galbraith et al., 2011; Janz et al., 1996; Johnson et al., 2009; Lyles et al., 2007; Neumann et al., 2002; Pendergast, Urada, & Podus, 2001; Ross, 2010). Implementation includes multiple sessions, small group format, and knowledgeable, skilled facilitators. Content includes HIV/AIDS information, risk identification, and skill-building to address risk, and creating a supportive environment. Pedagogy includes peer group discussion and interaction; demonstration, modeling, and role-playing; and tailored, culturally relevant information. In this study, we evaluated the potential of teaching frontline service providers "common factors" of successful behavior change HIV prevention programs and supporting them in the development of their own programs.

Method

We recruited eight HIV prevention organizations from regions of Ukraine with the highest rates of HIV and epidemics concentrated among people who inject drugs (PWID), specifically the eastern, southern, and central regions (see Table 1). Ukraine in particular has one of the most severe HIV epidemics in the region, particularly among PWID and their sex partners (Booth, Lehman, Dvoryak, Brewster, & Sinitsyna, 2009; Ministry of Health of Ukraine, 2010). While injection drug use accounts for 36% of new HIV cases, heterosexual sex has been the predominant route of HIV infections since 2008 (UNAIDS, 2010). In some regions of Ukraine, specifically in the south and east, HIV rates among PWID have been estimated as high as 55% (Booth et al., 2013; UNAIDS, 2010). We widely circulated an announcement about the study to HIV prevention organizations throughout Ukraine. We invited agencies interested in the study to complete an application to participate that included information about agency experience working with people who inject drugs and motivation for wanting to participate in the project. We selected 8 NGOs from the 14 that completed applications to reflect real-world variability in terms of agency history, size, mission, and context. Agencies were not selected to participate in the study due to small size (e.g., an annual budget of less than $4,500), concerns with diversity (i.e., having only one agency from a particular city or district participate), existing international research collaborations that overlapped with the project's goals, and small number of clients who inject drugs. All study agencies worked from a harm reduction perspective with diverse clients, including PWID, and conducted street-level outreach that included needle exchange and information dissemination. Agencies also provided a range of other services that included HIV and hepatitis C testing, social support, community centers, psychosocial

support for opioid substitution therapy patients, and advocacy. Agencies varied in size, from a small NGO primarily staffed by volunteers to a large organization staffed by paid professionals. Study NGOs differed significantly in their leadership, which included medical doctors, former drug users, university professors, and lawyers.

In June 2013, we held a 3-day, interactive workshop with two staff members from each agency who would work on developing the intervention. The workshop curriculum was developed by a multidisciplinary research team with more than two decades of experience designing, implementing, and evaluating behavior change HIV prevention interventions for diverse groups, including drug users, and in a variety of settings, including Eastern Europe. We also worked with the National Network of STD/HIV Prevention Training Centers, which developed and implemented a program for teaching service providers the theoretical foundations of behavior change HIV prevention interventions. The workshop was primarily facilitated by a Ukrainian fluent in Russian with master's degree in epidemiology from a U.S. institution, a master's degree in public health from a Ukrainian university, extensive experience working with drug users in the area of HIV prevention in Ukraine, and experience conducting trainings with NGO staff. Day 1 defined behavioral science and behavior change-based HIV prevention interventions. Participants were introduced to concepts of HIV risk behaviors and determinants, with a focus on distinguishing between biological, behavioral, structural, and social determinants of HIV risk. Participants were also briefly introduced to behavior change theory and how to use it to address behavioral determinants of HIV risk. Day 2 focused on the relationship between behavioral and social determinants of HIV risk and intervention strategies. Following Dolcini, Canin, Gandelman, and Skolnik (2004), we used five theoretical domains as a framework: Risk Perception and Appraisal; Self-Perception; Emotion and Arousal; Relationships and Social Influences; and Environmental and Structural Factors (Dolcini et al., 2004). After describing each theoretical domain, participants completed an HIV prevention intervention activity that corresponded to that domain. Participants identified an HIV risk determinant (e.g., low perception of personal risk of HIV infection) that they encountered among their clients and developed an intervention activity to address that particular determinant. Day 3 focused on intervention development, with the aim of taking individual intervention activities and integrating them into a complete HIV prevention intervention for specific populations. We introduced participants to Behavior Change Logic Models, in which they had to write a problem statement related to HIV risk among their clients; identify the behavioral determinants related to that problem; develop possible intervention activities; identify expected outcomes; and conceptualize potential measurement strategies to assess whether the desired change occurred. Day 3 also explored components of intervention manuals and the manualization process. During the training, agencies were provided with examples of manuals for small-group HIV prevention interventions in order to illustrate the components of good manuals, including written in plain language, clear and concrete instructions, indication of materials needed, time allotted for activities, and clear learning objectives for both the program and individual activities.

Agencies were given 5 months to develop programs based on a timeline with milestones (e.g., identify a target group, complete a logic model, write a program outline). Each agency was assigned a member of the research team as a consultant. Consultants were researchers

from a Ukrainian university fluent in Russian with master's degrees and expertise in public health interventions and qualitative and quantitative data collection. Consultants regularly contacted each agency via email, Skype, or mobile phone; agencies often initiated contact. The number and frequency of consultations varied between agencies, particularly as agencies developed their logic models; contact frequency increased as deadlines approached. Two agencies only contacted their consultants 3 times. The remaining agencies contacted their consultants between 8 and 16 times over the 3-month period during which they most actively worked on developing their interventions. Duration of phone and Skype consultations ranged from 5 minutes to an hour, with an average length of 25 minutes. Consultations were used to obtain information about the process of program development, answer questions related to intervention development, and provide feedback on materials agencies developed. All questions regarding intervention content and format were referred to the research team and discussed before final responses were provided to the agencies. The research team reviewed draft manuals to determine whether they reflected what was taught in the training. The research team discussed each program and provided written feedback about ways to improve or modify the proposed program. After receiving feedback and revising their programs, agencies piloted their programs with a small group of volunteers (former clients, other agency staff members, key stakeholders) in order to identify ways to improve the intervention. Agencies then revised their manuals to reflect recommended changes identified through consultation and piloting. Agencies then turned in their manuals to the study team for analysis.

Three members of the research team reviewed each manual; none of the reviewers were the agency's consultant. Each manual was reviewed using a standardized rubric, which agencies were provided to guide their manual development (Table 2). Intervention manuals were evaluated for both intervention format and intervention content. Reviewers also qualitatively assessed the extent to which the program met the criteria for a behavior change HIV prevention intervention as taught during the training, the feasibility of continually implementing the program with new clients, and how clear and thorough the manual was to follow (i.e., whether the reviewer thought she could implement the program from the manual alone). After each reviewer completed her assessment of the manual, the three reviewers' assessments were compared for consistency and discrepancies discussed, and a combined comprehensive assessment incorporating each reviewer's feedback compiled. Study protocols and materials were reviewed and approved by the Institutional Review Board at the Medical College of Wisconsin and the ethics committee of the Sociological Association of Ukraine. All trainings and materials were in Russian, the dominant and language of choice in the regions of Ukraine where the study was conducted.

Results

Buy-In

All agencies successfully developed programs that reflected common factors of effective behavior change interventions in terms of intervention format and content (see Table 3).

Buy-in from participating agencies was high and the behavior change approach was novel for many providers. They saw this method of program development as a way to reach

current or former clients who participated in past programs but continued to engage in high-risk drug use practices. Agencies met all study-imposed deadlines, regularly communicated with consultants, and initiated program improvements after piloting. Because agencies were unfamiliar with the process of developing programs and manualizing them, staff had questions about correspondence between the logic model and intervention structure, style of writing, and contents of manual.

Although encouraged but not required to do so, five agencies conducted focus groups with clients, and the remainder interviewed current and former program participants, consulted with various staff members within the agency, or administered surveys with members of the target population. They used this formative research to identify behavioral determinants of HIV risk; obtain information on the demographic characteristics of the target population; and receive input regarding the format, content, and delivery of the intervention. For at least one agency, while study buy-in was high, the final program reflected a single individual's perspective and interests rather than input from multiple people within the agency.

Target Population

Given the study's goals and the epidemiology of the HIV epidemic in Ukraine, agencies were required to focus their interventions on HIV risk reduction among PWID. They were free to identify a specific target population within this broad category in order to reflect the specifics of the HIV epidemic in their region and the existing expertise and interests within the agency. Each agency identified a unique target population but there was overlap. Four agencies developed programs for women and four developed programs for both men and women. Two agencies developed programs for female commercial sex workers. Five agencies restricted the age range of the target population participants to focus on young adults at risk for HIV. One agency specifically targeted stimulant users, another targeted poly drug users, a third targeted PWID with a serious comorbidity, and the remaining agencies focused either on opiate users or people who inject any drugs.

While agencies identified well-defined target populations for their programs, some agencies imposed very narrow inclusion criteria in the first iteration of their programs. One agency identified injection drug users younger than 35 years with high levels of HIV knowledge and access to sterile drug use equipment but who continue to share used needles and syringes. Other agencies originally identified populations that were too broad, for example, one agency originally proposed an intervention for drug makers, sellers, and users. Finally, two agencies developed somewhat draconian attendance requirements on program participants, for example, not allowing someone who missed a single session to continue participation.

Intervention Format

All agencies created small group, multisession interventions that included progressive attention to behavior change, opportunities to practice skills to change risky behaviors, sessions that built upon previous sessions, and clearly defined expected behavior change outcomes. Agencies successfully wrote manuals according to these guidelines with the support of the consultants. The agencies successfully developed interactive programs with varied pedagogical techniques, including role-playing exercises to practice skills and discuss

"risky situations," personal risk assessments, and goal-setting exercises. A step-by-step goal-setting approach to behavior change was novel for many agencies, as was working with clients to set their own rather than agency-defined goals.

Agencies struggled to limit the number and length of sessions. One agency, for example, originally developed an 18-session program. Through the consultation process, they reduced the program to 10 sessions. Another agency's program comprised sessions 4 to 5 hours in length. After consultation, the agency decided to retain the original length, based on focus groups with clients and their own pilot test data regarding feasibility and acceptability with the target population. Similarly, some agencies tried to include too many activities into individual sessions, for example, as many as 11 activities in one session.

Intervention Content

Agency programs exhibited great range in terms of content, including activities and strategies to address HIV risk behaviors and the balance of emotional, psychological, behavioral, and structural dimensions of HIV risk. Agencies worked on their own to define what they saw as the key challenges that contribute to their clients' behavior-related HIV risks. Some of them tried to incorporate more structural or contextual elements of HIV vulnerability into their programs, such as teaching clients how to negotiate risky situations and achieve risk reduction in a particular buying/selling market structure, and incorporating issues related to legislation and law enforcement into the programs. Interventions for commercial sex workers addressed problems of violence against women. Other programs for women included group discussions related to decision-making around condom use and creating a sense of personal empowerment through exercises that aimed to build perceived self-worth and improve communication skills through the use of "I" statements. The agencies' interventions focused on specific behavioral determinants, teaching problem-solving skills, incorporating goal-setting strategies, and providing tools for participants to incorporate behavior change into daily lives and social relationships.

Agencies encountered several problems with intervention content, particularly related to the balance of information, theory, and skills building. Some agencies tried to simplify their content and initially only included lectures, information dissemination, and videos. Other agencies tried to incorporate theoretical and scientific explanations of HIV risk behaviors into their sessions, rather than focusing on skill-building and directly addressing risk behaviors. Agencies were encouraged to decrease the centrality of information dissemination in their programs and focus instead on skill-building and interactive opportunities for participants to learn from each other and facilitators.

Discussion

This study aimed to give frontline service providers the tools to develop programs that are potentially more sustainable because they reflect expertise and needs within the organization. In this particular case, the programs developed by study agencies reflected the epidemiological shift from primarily drug use to heterosexually driven (Burruano, 2010; Ministry of Health of Ukraine, 2010). By teaching service providers the fundamental components common to effective, evidence-based HIV prevention interventions,

organizations can more rapidly respond to local changes in HIV epidemiology and other trends. Staff at study agencies enthusiastically supported the concept of small group, behavior change programs that simultaneously incorporated common elements of evidence-based HIV prevention interventions and were tailored to reflect their particular clients' needs, contexts, organizational resources, and staff expertise and experience.

We did not anticipate that many study agencies would choose to develop programs for women. The programs developed by study agencies reflect the epidemiological transition from an epidemic driven primarily by drug use to heterosexual transmission, as well as shifting interest to HIV prevention among women from primary donor organizations in Ukraine (Burruano, 2010; Gaventa, 2013; Ministry of Health of Ukraine, 2010; "Ukraine Harmonized AIDS Response Progress Report," 2014). Moreover, while globally men represent the majority of those who inject drugs, women in Ukraine who inject drugs have higher rates of HIV than men and are at increased risk for HIV due to both drug and sex-related risks (Corsi et al., 2014). The programs developed by agencies reflected female drug users' unique HIV prevention needs, including their diminished ability to engage in safe drug use and sexual behaviors due to power inequalities and other relationship dynamics (El-Bassel, Terlikbaeva, & Pinkham, 2010; Miller & Neaigus, 2001; Wechsberg et al., 2012; Yorick et al., 2012); marginalization, stigma, and isolation within their communities (Blankenship & Koester, 2002); and abuse, harassment, and physical and sexual violence at the hands of clients, other partners, and police (Decker et al., 2012; Decker et al., 2014).

This approach to HIV prevention intervention development drew on existing expertise within the agencies, thus potentially increasing provider buy-in compared with externally developed programs. Providers at all levels within these NGOs are highly trained in harm reduction strategies, group facilitation skills, program evaluation, management, advocacy for drug users, legal issues, case management, and publishing. Moreover, many agency personnel came to work in these organizations through personal connections to and experiences with HIV or substance use issues. They saw this research project as an opportunity to combine the skills and knowledge they accumulated through trainings and first-hand experience. Moreover, research shows that when service providers modify pre-packaged interventions, they may replace existing activities with new ones that do not operationalize the theoretical constructs that inform that intervention or that do not teach the necessary skills for behavior change (Galbraith et al., 2008). Training providers on common factors of effective interventions and the theoretical constructs that inform them may result in better adaptations of existing programs (Dolcini et al., 2004).

However, in some cases the programs reflected individual staff members' expertise and interests, rather than collective interests within the organization. When a program represents a single individual's interests, sustainability is also a concern. For example, if that individual leaves the organization or changes roles, the likelihood that the program will continue diminishes (Krein et al., 2010). While research has shown the importance of a program "champion" for a program or initiative to be adopted and sustained, it is also important that there is collective buy-in and shared decision-making (Aarons, Ehrhart, Farahnak, & Sklar, 2014).

Limitations

This study focused on teaching the skills necessary to develop behavior change HIV prevention interventions. Behavior-based approaches to prevention have a long history of demonstrated effectiveness (Albarracin et al., 2005; Darbes et al., 2008; Herbst et al., 2005; Lyles et al., 2007; Pendergast et al., 2001). However, a risk behavior approach has been criticized for its failure to address structural determinants of HIV risk, including stigma and discrimination, gender norms, violence, harsh drug laws, and access to health care (Hardee, Gay, Croce-Galis, & Peltz, 2014; McNeil & Small, 2014). Another limitation of the programs developed by the agencies was that although they are group-based, they generally address HIV risk at the individual level. While some of the programs included peer-based elements, such as improving communication skills among drug use and sex partners, the programs did not aim to change the drug use norms of entire social networks (Booth, Lehman, Latkin, et al., 2009; Latkin, Sherman, & Knowlton, 2003).

Other limitations include issues related to sampling and potential variation in experience and training across organizations. A purposeful sampling strategy was employed in order to achieve diversity, as described above, in order to test the feasibility of this study's approach to intervention development. The study sample was also limited to agencies with significant experience working in HIV prevention and with the specified target population, as well as existing financial, technical, and training capacity. This sampling strategy and small sample size limit the generalizability of the study's findings. A larger, future study that employed a random sampling strategy and a comparison condition could address questions related to whether this approach can be successfully implemented on a larger scale with more diverse organizations. Despite these limitations, the method of intervention development explored here can be part of a comprehensive HIV prevention strategy that addresses multiple determinants of HIV risk across diverse populations.

If scaled up, issues of sustainability would need to be addressed. During the consultation and intervention development phase, study staff worked closely with agencies in order to answer questions and give feedback. The need for individualized plans and consultation strategies highlights that a "one size fits all" approach may not work: Each agency comes with its own set of expertise and understanding of what will work with and be acceptable to clients. Finally, this study did not evaluate the effectiveness of these agency-developed programs. In future studies, we will evaluate the effectiveness of the programs developed by these agencies in order to determine whether they do reduce HIV risk among participants. Additional studies are also need to assess issues related to long-term implementation fidelity with agency-developed interventions compared with externally developed interventions.

Conclusions

Efforts to "bridge the gap" between research and practice through technical assistance programs, capacity-building strategies, and increased monitoring and oversight have not translated into the implementation of EBIs by frontline service providers. Service providers rarely implement EBIs with fidelity, despite significant investment of financial, human, and material resources into dissemination efforts. At the same time, funding and capacity-building agencies, in partnership with service providers, spend significant resources taking

interventions developed through research for one population and adapting and modifying them to fit new target populations (McKleroy et al., 2006). The impact of this frontline "tailoring" process on intervention effectiveness, however, is not well researched. This process also creates the need to continually adapt each intervention for each new population, requiring significant resources and long term, unsustainable researcher-agency-funder partnerships. In response to these implementation shortfalls, dissemination researchers have called for more attention to the consequences of implementation fidelity versus adaptation, and models to promote implementation fidelity among frontline service providers have proliferated (Flaspohler, Duffy, Wandersman, Stillman, & Maras, 2008; Wandersman et al., 2008; Wingood & DiClemente, 2008). This project proposes a new approach to intervention development and dissemination that takes these realities of research-to-practice transfer into consideration.

This study explored a model of evidence-based program development that puts providers in control of the content, format, and process of the programs. The strategy of HIV prevention intervention development explored in this study can potentially increase the capacity of HIV prevention NGOs to conduct theory-based, multisession risk reduction interventions (Kelly et al., 2006). We also know that NGOs often liberally adapt and modify the interventions in response to client needs, organizational context, and sociopolitical climate. Our previous work has also demonstrated that NGO staff often are highly educated with professional degrees, and begin working in HIV prevention due to a commitment to the target population (Owczarzak, 2010). Our common factors approach to dissemination draws on this expertise. It offers an alternative to technical assistance and capacity-building programs that often rely on experts who are unfamiliar with the local or national context and potentially undermine the effectiveness of these programs. This strategy also could significantly reduce the amount of time it takes for service providers to deliver the most current, culturally relevant interventions to at-risk populations.

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Table 1

Characteristics of Participating Agencies.

Agency no.	Region	Clients served	Years in existence	Full-time/part-time/volunteers	No. of PWID served/6 months	Annual budget
1	South central	PWID (63%), youth, CSW, street children TB patients	10	8/14/5	~2,000	$180,500
2	Southeastern	PWID (60%), CSW, prisoners, PLWHA, youth, homeless	13	17/17/10	1,322	$150,000
3	Southern	PWID (70%), CSW, youth, PLWHA	12	20/45/10	~2,000	$375,800
4	Central	PWID (80%), CSW	12	15/22/<100	5,345	$271,000
5	Southern	PWID (65%), CSW, MSM, prisoners, street children	10	50/*/3	2,947	$500,000
6	Eastern	PWID (60%), CSW, PLWHA, TB patients, street children	9	21/12/14	2,039	$170,000
7	Southern	PWID (80%), CSW, prisoners, street children	13	35/80/*	~4,000	$712,822
8	Central	PWID (60%), prisoners, PLWHA, youth	12	36/38/4	2,824	$587,500

Note. PWID = people who inject drugs; CSW = commercial sex worker; PLWHA = people living with HIV/AIDS; MSM = *men* who have sex with *men.*

Table 2

Intervention Assessment Criteria.

Intervention Format		
Do the intervention and manual:		
Include warm up exercises	[ ] Yes	[ ] No
Establish group norms and rules	[ ] Yes	[ ] No
Use a small-group format	[ ] Yes	[ ] No
Include multiple sessions	[ ] Yes	[ ] No
Build each session on the previous one	[ ] Yes	[ ] No
Provide progressive attention to specific behavior change	[ ] Yes	[ ] No
Offer opportunities to practice skills and behavior change	[ ] Yes	[ ] No
Have a defined endpoint	[ ] Yes	[ ] No
Use examples to illustrate explanations	[ ] Yes	[ ] No
Provide clear instructions	[ ] Yes	[ ] No
Intervention Content		
Does the proposed intervention:		
Target a clearly defined population	[ ] Yes	[ ] No
Address specific HIV risk behaviors (behavioral determinants)	[ ] Yes	[ ]No
Include appropriate intervention activities	[ ] Yes	[ ] No
Identify specific expected outcomes of each activity, session, and program overall	[ ] Yes	[ ] No
Promote desired HIV risk-related behavior change as part of a more general personal change	[ ] Yes	[ ] No
Encourage behaviors that support personal transformation	[ ] Yes	[ ] No
Provide a setting that helps participants feel safe in new identity	[ ] Yes	[ ] No
Teach problem-solving skills	[ ] Yes	[ ] No
Include goal-setting strategies	[ ] Yes	[ ] No
• Achievable goals related to HIV risk reduction	[ ] Yes	[ ] No
Help participants become more aware of their:		
• Actions	[ ] Yes	[ ] No
• Emotions	[ ] Yes	[ ] No
• Thoughts	[ ] Yes	[ ] No
Provide tools for participants to incorporate behavior change into daily lives and social relationships	[ ] Yes	[ ] No
General		
Based on your knowledge of this project's goals and HIV prevention programs, how well do you think this program meets the criteria of an evidence-based, behavior change HIV prevention intervention?		
How feasible do you think it will be for the agency to continually reach new clients with this program for maximum impact?		
Does the manual successfully provide step-by-step instructions for each activity and each session? Do you think that **you** *would be able to implement the program from the manual alone?*		
Action Items		
What are this program's three main strengths?		
What are three specific things that should be changed or improved?		

Table 3

Summary of Programs Developed by Agencies.

Agency	Target group	No. of sessions	Length (hours)	Aim	Approach
1	Women who inject drugs and engage in commercial sex work	7	1	• Reduce sexual and injection related risks	• Personal risk assessment • Skills for properly cleaning injection equipment and drugs • Condom negotiation skills • Empowerment and peer support
2	Heterosexually active women 22–40 years old who inject drugs	10	2	• Build self-esteem • Empower women to insist on condoms and not share drug use equipment	• Personal risk assessment • Self-esteem building • Interpersonal violence awareness • Condom and needle use negotiation skills • Communication skills
3	Heterosexually active women 25–40 years old who inject drugs and have children	6	1.5	• Increase HIV-related knowledge • Increase personal desire to stay healthy • Increase skills related to safe drug use and sex	• HIV and STI information • Personal risk assessment • Skill building for safer drug use and sex • Identify emotional triggers
4	Men and women with a comorbidity who inject drugs	10	1.5	• Increase sense of self-worth and personal motivation to stay healthy • Build skills for sustained behavior change	• Personal risk assessment • Information about HIV-related drug use risks • Psychological counseling • Identify emotional triggers and develop coping mechanisms • Communication skills building
5	Women who inject drugs and engage in commercial sex work	10	3	• Increase HIV-related knowledge • Increase skills related to safer drug use and condom use with paying partners	• Personal risk assessment • Risk reduction goal-setting • HIV and STI knowledge • Condom use negotiation skills • Interpersonal violence and coping mechanisms • Safe drug use skill-building

Agency	Target group	No. of sessions	Length (hours)	Aim	Approach
					• Peer communication
6	Male and female “poly” drug users 25–35 years old	8	2	• Establish intention to change drug use behaviors • Increase self-efficacy regarding safer drug use and sexual behaviors • Improve control over emotional states that may lead to risky behaviors	• Skill-building related to safe drug use and sexual behaviors • Identify emotional triggers and coping strategies • Communication skills-building
7	Men and women under 35 years old who inject drugs and use harm reduction services	10	4, including lunch breaks	• Increase personal motivation to reduce HIV risk • Increase skills and knowledge related to safely purchasing and using drugs	• Personal risk assessment • Identify emotional and situational triggers • Communication skills • Skill-building related to accessing and consistently using clean needles • Peer communication
8	Men and women 18–30 years old who inject stimulants	8	1.5	• Reduce sexual and injection related risks	• Personal risk assessment • Peer norms about safe injecting • Goal setting • Condom negotiation skills

Note. STI = sexually transmitted infection.