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Community Wise: A formative evaluation of a community-based health intervention

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Abstract

Individuals with histories of incarceration and substance abuse residing in distressed communities often receive suboptimal services partly due to a lack of empirically supported substance abuse treatments targeting this population. Grounded in communitybased participatory research, we developed *Community Wise*, a manualized, 12-week, group behavioral intervention. The intervention aims to reduce substance use frequency, HIV/HCV risk behaviors, and reoffending among individuals with histories of substance abuse and incarceration. Thirty six individuals were recruited to participate in a formative evaluation of *Community Wise* processes and outcomes. Analysis showed significantly lower post-intervention number of cigarettes smoked per day, days using an illicit drug, money spent on illegal drugs, and rearrests. Based on the evaluation, the research team made the following changes: 1) added a session on sexuality; 2) increased the number of sessions from 12 to 15; and 3) modified strategies to help participants develop and implement capacity building projects.

Keywords: Substance abuse treatment, community based participatory research, critical consciousness theory, HIV/HCV prevention, reoffending

Introduction

Health disparities in the United States are well documented and result in a significant financial burden to the nation. For example, the per capita rate of new AIDS cases is 8 times higher for Blacks than it is for Whites (1). These differences, as identified by the National Healthcare Disparities Report, mandated by Congress, impose great financial and human costs. According to the Joint Center for Political and Economic Studies, health disparities cost the United States $1.24 trillion between 2003 and 2006 and this burden has only continued to grow (2). Disparities related to race and income are exacerbated in low-income African-American communities, where

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substance abuse and incarceration rates are high. Health indicators show that African-Americans suffer significantly harsher consequences of substance use than their White counterparts (e.g. higher rates of HIV/HCV infection), and yet, have less access to HIV and substance abuse interventions that could mitigate this disparity (3, 4).

For low-income African-Americans involved in the criminal justice system, incarceration has a significant impact on health and substance use, especially upon release. Few individuals receive substance abuse treatment and HIV/HCV prevention services while in prison and they often return to the same distressed communities in which they obtained and used drugs, engaged in related risk behaviors, and became exposed to the criminal justice system (5). Research has identified these issues as major obstacles in maintaining recovery (6, 7).

Despite increased efforts to reduce health disparities in distressed African American communities, few evidence-based interventions have been successfully adopted by these communities (8). Often substance abuse and community reentry programs focus solely on individual treatment even though community-based models have been shown to enhance effectiveness by addressing the environmental context in which problems occur (9).

This paper reports results of the formative evaluation of *Community Wise,* a community-based, manualized, multilevel health intervention designed to reduce substance use frequency, HIV/HCV risk behaviors, and reoffending among individuals with histories of substance abuse and incarceration residing in distressed communities in Newark, New Jersey. The long term goal of *Community Wise* is to reduce health disparities. Distressed communities are defined as geographic areas where rates of poverty, drug use and traffic, violence, and disease are higher than in neighboring areas (10).

Developing "Community wise"

Community based participatory research (CBPR) principles were used to develop and pilot-test *Community Wise*. CBPR requires that researchers and community members work together to identify community problems and solutions through the combination of scientific and experiential knowledge. The key purpose of CBPR is to help create knowledge that can be immediately used to help the community involved in the research (11,12).

Community Wise was developed by a team of community members, consumers (individuals with histories of incarceration and substance abuse and their families and friends), service providers, researchers, and government officials who compose the Newark Community Collaborative Board (NCCB). The NCCB has been working together using a CBPR framework since September 2010 to develop *Community Wise*. During phase 1 of the formative evaluation, the NCCB was formed; trained; and engaged in CBPR to conduct a needs assessment as well as an ethnographic study that informed the development of *Community Wise*. The NCCB also developed the first edition of the *Community Wise* manual (13–15). During phase 2 of the formative evaluation, *Community Wise* was implemented for the first time in the Spring of 2012 with 26 individuals at a community based agency to test the feasibility of the manual and develop the first evaluation procedures (16). The current paper reports findings from phase 3 of the formative evaluation, where the NCCB implemented the revised version of *Community Wise*'s manual with 36 individuals at a community-based agency in Newark, NJ. Phase 3 aimed to examine the feasibility of the revised manual and maximize its potential efficacy. This paper discusses, in detail, the process implemented by the NCCB to evaluate the intervention's feasibility and the lessons learned in this process.

Theoretical framework

Community Wise was informed by Paulo Freire's critical consciousness theory (17). Freire defined critical consciousness as the ability to "perceive social, political, and economic contradictions, and to take action against the oppressive elements of reality" (p. 19). Based on this theory, vulnerable populations should be encouraged to engage in critical dialogue about the oppressive elements in their lives and communities. Critical consciousness can empower these individuals to engage in social action (e.g. engage in their communities' political process) to

combat the oppression they experience (e.g. lack of access to affordable and healthy food, meaningful employment, and quality health care). Oppression can be internalized, contributing to criminal activity, substance use and other risk behaviors. Using critical consciousness theory, *Community Wise* seeks to redirect the effects of oppression away from destructive, health-risk behavior into outward, positive action such as planting a community garden and/or advocating for community resources. In order to achieve this goal, the 12 group sessions that make up *Community Wise* encourage participants to think critically and engage in dialogue about the oppression they experience. At the same time, participants are encouraged to combat oppression by working with one another to create a community capacity building project and develop the skills they need (e.g. leadership) to bring about change in their community (e.g. increasing access to quality foods) (18). Table 1 displays a summary of the intervention's sessions with respective goals.

Table 1. Intervention sessions and respective goals

Session # and Theme	Overall Goals
Session 1: Icebreaker and Welcome	*To introduce participants and facilitators to one another,* *To present an overview of Community Wise* *To establish ground rules.*
Session 2: Critical Thinking	*To explore critical thinking literature and evaluate one's own thinking patterns*
Session 3: Solar System	*To use the solar system image as a metaphor to help participants explore power dynamics and the role of community building and civic engagement as empowerment tools*
Session 4: Empowerment	*To help participants development personal goals and a capacity building project as empowerment strategies*
Session 5: Funhouse Mirrors	*To use the funhouse mirrors image metaphor to help participants explore the impact of internalized and structural oppression on their communities, thinking patterns, and risk behaviors*
Session 6: Empowerment	*To help participant develop personal goals and a capacity building project as empowerment strategies*
Session 7: Walls	*To use the metaphor of confining walls image to help participants identify structural oppressive systems and appropriate strategies for overcoming them*
Session 8: Empowerment	*To provide support to participants as they attempt to implement their personal goals and capacity building project*
Session 9: Historical Trauma	*To use the historical trauma image to examine the impact of historical trauma on participants' present behaviors*
Session 10: Empowerment	*To support participants in evaluating progress and addressing challenges in their personal goals and capacity building projects.*
Session11: Family structure and dynamics	*To use the family image to explore how different family structures and dynamics may influence both positively and negatively the perpetuation of structural and internalized oppressions*
Session 12: Termination and Personal Evaluation	*To help participants work through feelings that arise from ending group work and to articulate orally new skills and ways of thinking acquired through their participation in Community Wise. Participants are encouraged to share how new skills and ways of thinking may help them accomplish longer term plans*
Graduation	*Participants celebrate their work, and engage with community members to raise awareness about substance abuse, HIV/ HCV risk behaviors, and reoffending.*

Methods

A mixed-methods research design informed by CBPR was implemented to test *Community Wise's* feasibility. Quantitative methods consisted of process measures and a pre-posttest design to gage changes in substance use frequency, HIV/HCV risk behaviors, and reoffending before and after the intervention. Qualitative methods consisted of analyzing four focus groups with *Community Wise* participants to explore participants' feedback about the intervention and qualitative analysis of session video digital recordings

to explore the development of critical consciousness and the application of *Community Wise's* key ingredients. The findings were then combined to inform revisions made to the manual and the research protocol. The current paper will focus on the qualitative component of the evaluation.

Staff and NCCB training and monitoring

The current evaluation was conducted after obtaining approval from the Institutional Review Board (IRB) at two partner universities and at the community based organization where groups were held. Social workers and research support staff were directly supervised by the Principal Investigator (PI). The staff received training on study measures, data collection, and the *Community Wise* manual. Members of the NCCB received training on CBPR principles and philosophy, ethical treatment of research participants, and research methods and procedures. NCCB members met monthly to review and approve research procedures, resolve any challenges, and make decisions about potential changes to the manual and the research protocol.

Sample recruitment

Participants were recruited by the NCCB using purposive sampling. Specifically, recruitment flyers were distributed to service providers and potential study participants who contacted the study's phone number so that people could help spread the information to friends, family members, and acquaintances.

To be eligible, participants had to have been incarcerated within the past four years, have a history of substance abuse within the past year, be 18 years of age or older, reside in Essex County, NJ, speak English and provide informed consent. Participants were screened by a masters-level social worker using standardized measures (19–22).

Participants were deemed ineligible if they were found to have a high level of suicidality, an unstabilized psychotic disorder, gross cognitive impairment or did not have a moderate to high level of drug and/or alcohol use in the past year.

Participants received $15 for completing a clinical screening. Individuals who met eligibility criteria were invited to participate in *Community Wise* and distributed into four intervention groups based on gender and availability. Study staff reviewed a written consent form, outlining the risks and benefits of participating and the certificate of confidentiality obtained from the federal government to prohibit court-ordered violations of participants' confidentiality.

In signing the consent form, participants agreed to have all *Community Wise* sessions video-taped and to use code names during the group sessions to protect their confidentiality. Seventy-nine participants completed a phone screening followed by a clinical screening to assess eligibility. Forty individuals were assigned to *Community Wise* and 36 completed the 12-week data collection follow-up.

Procedures

The qualitative evaluation included four focus groups (one focus group for each *Community Wise* group) which occurred after the *Community Wise* sessions were completed.

The purpose of the focus groups was to obtain feedback from participants. An NCCB member and a research assistant hired specifically to fulfill this role conducted the focus groups. All 40 participants who attended at least one *Community Wise* session were invited to participate. Those who participated received $20 (N=36).

Group facilitators attended weekly clinical supervision with the project PI. Clinical supervision enhanced treatment fidelity and provided facilitators with feedback.

During supervision, the group discussed challenges, ensured that the manual was being implemented accurately, and discussed non-responsive clients. The PI watched all session videos and completed a checklist to provide feedback to facilitators.

Data analysis

Data from qualitative analyses included a random sample of 23 out of 48 digital videos of group sessions and verbatim transcriptions of focus groups. The focus group transcripts were coded and analyzed manually by one of the authors and a thematic analysis was conducted (23). This process involves reading the data several times, coding and recoding through a process of constant comparison until themes and categories become clear. The focus group data complemented quantitative measures of participant feedback. Such triangulation helps ensure completeness of data and can reveal convergence or dissonance in key themes developed in our analyses (24).

Video data was open coded by two research assistants using N-vivo qualitative data analysis software. Inter-rater reliability was calculated reaching over 90% agreement on all codes. The codes were then analyzed for common themes by the PI and two NCCB members. The research questions included: 1) What were the main *Community Wise* ingredients impacting critical consciousness, drug use frequency, HIV/HCV risk behaviors, and reoffending?; and 2) Were these ingredients successfully implemented and if not, how should they be modified?

Results

A total of 36 individuals participated in this study. Ninety-four percent were African-American; most were heterosexual, single, unemployed and reported a mean household yearly income of less than $10,000. Most were not currently supervised by the criminal justice system. The charge associated with participant's last incarceration varied; the most common charges were drug possession, property and technical violations, and violent crimes. On average, participants had been released from their last incarceration 13 months prior to the intervention. All participants were either using an illicit drug or alcohol at the time of baseline or reported use within the past year. Most were smoking an average of ten cigarettes per day at the time of baseline. Ten percent reported being HIV positive and 11% reported being HCV positive. Table 2 displays participants' demographics.

Table 2. Participants' characteristics at baseline (N=36)

Characteristic	N (%) or Mean (±SD)
Male	18 (49)
Heterosexual	32 (89)
Age	44.65 (±8.4)
Race	
Black/African American	34 (94)
White	2 (06)
Ethnicity	
Hispanic	3 (07)
Not Hispanic	33 (93)
Household yearly income	7,340.73 (±9,805.5)
Religion	
Christian	24 (67)
Muslim/Islam	8 (22)
None	4 (11)
Marital Status	
Single/never married	18 (57)
Unemployed	33 (91)
Criminal Justice System Status	
Parole	4 (10)
Probation	5 (13)
No supervision	27 (77)

Table 2. (Continued)

Characteristic	N (%) or Mean (±SD)
Number of months since release from incarceration	13 (±13.8)
Criminal Charge at Last Incarceration	
Violent crime (assault, homicide, carjacking, robbery)	4 (12)
Property crime (burglary, fraud, shoplifting)	13 (36)
Drug Possession	13 (36)
Drug dealing	1 (02)
Sex Work	1 (02)
Warrants/technical violations	4 (12)
Reporting committing any crime(s) above since last incarceration	8 (22)
Substance Use	% (n) or mean (±SD)
Reported alcohol use in the past 90 days	21 (58)
Number of days in which alcohol was used in the past 90 days	28 (±36)
Number of heavy drinking days (past 90-days)	13 (±28.2)
Average Drinks per drinking day (past 90-days)	4.93 (±14.3)
Number of Current Smokers	31 (86)
Number of Cigarettes per day	9.2 (±8.7)
Reported illicit drug use past 90 days (cocaine/opiates/marijuana)	28 (78)
Number of days any illicit drug use past 90 days (cocaine/opiates/marijuana)	40.52 (±34.7)29.5 (±37.5)
Money spent on illicit drug per using day	
HIV/HCV Status and HIV/HCV Risk/Protective Factors	
HIV +	4 (11)
HCV+	5 (14)
Average number of times tested for HIV	7.5 (±9.9)
Average number of times tested for HCV	5.0 (±8.7)
Number of times engaging in risky drug use in past 30 days	0.9 (±5.1)*
Frequency of engagement in risky sexual behaviors	0.5 (±0.3)*
Psychological Distress**	
PTSD*** (responding yes to having had a near death experience)	20 (56)
PTSQ (PTSD Symptom Severity)	1.1 (±0.3)
BSI 18 Total Score	0.7 (±0.2)
Attitudes Toward Research	
Average # agreeing that research is important	31 (86)
Average # agreeing that research procedures were easy to understand	21 (58)
Average # agreeing that researchers do not always inform participants about the risks involved in health research	13 (36)

* Indicates that in average participants reported either never engaging or only engaging a few times in risky sex and/or drug use behaviors.

**Ranges from 0 to 4 (higher scores mean higher psychological distress).

***Ranges from 0 to 3 (higher scores mean higher PTSD symptom severity).

Intervention retention

Participants completed an average of 7 (± 3.85) out of 12 sessions. Participants were defined as having successfully completed the intervention if they attended six or more group sessions and showed clinical improvement.

Clinical improvement was established in clinical supervision and measured by specific progress that each participant made on personal goals, participation in capacity building projects, and improvement on distal outcomes. Seventy percent successfully completed the intervention. Completion was defined based on previous work examining other behavioral interventions in the literature (25, 26).

Specifically, successful completion included those who attended at least 7 sessions, demonstrated clinical improvement (e.g.: reduced drug use, improved mental health symptoms), and engaged in capacity building projects.

Findings from focus groups

A total of 25 out of 36 participants attended the focus groups. Analysis revealed two overall themes: 1) Participant satisfaction with the intervention, and 2) Areas of strengths and areas that need to be improved. Overall, focus group participants reported that the intervention was useful, with many expressing a desire to maintain contact with the program post-graduation as a means of continuing their personal growth and development. Participants identified group facilitators and the participant's manual as key factors in their satisfaction with C*ommunity Wise*. According to participants, the facilitators were viewed as a source of knowledge and information, as well as providing a support mechanism for some of the participants. For instance, a male participant noted that his facilitator took time from his schedule to check on him when he had no one else to turn to, which in turn provided the motivation he needed to continue the program. Participants reported the manual was useful in helping them think about the group work outside of group and it was a way to share what they were learning with others.

Participants had a few suggestions to improve the intervention. A female participant believed it is unrealistic to complete a capacity building project in twelve weeks. One of the male participants agreed and in order to address this issue in his group, they decided to meet outside of the scheduled sessions, at a participant's home, to "carry on our part of our project that we still feel we want to see through to the end." Finally, participants felt that *Community Wise* should provide them with concrete job leads and references to increase their chances of gainful employment; according to them, this should be the first priority of the intervention.

Findings from session videos

Analysis revealed Community Wise's mechanisms of change which included two overall domains: 1) Operational ingredients; and 2) active ingredients. Figure 1 displays the mechanisms of change.

Operational ingredients are intended to create a safe environment where the intervention can thrive. These included group introductions, a description of *Community Wise*'s background, and the mutual development of group guidelines. Combined, these activities served as a way for the facilitator to establish confidence, trust and commitment among the group members. For instance, in establishing group norms and expectations, the facilitators explained *Community Wise's* background to the participants, how the intervention was developed, and their personal commitment to it. Group norms and expectations were established by the participants themselves, who were encouraged during the beginning few sessions to come up with their own group guidelines. The guidelines were revisited throughout the intervention, as expectations changed and commitment to the group grew.

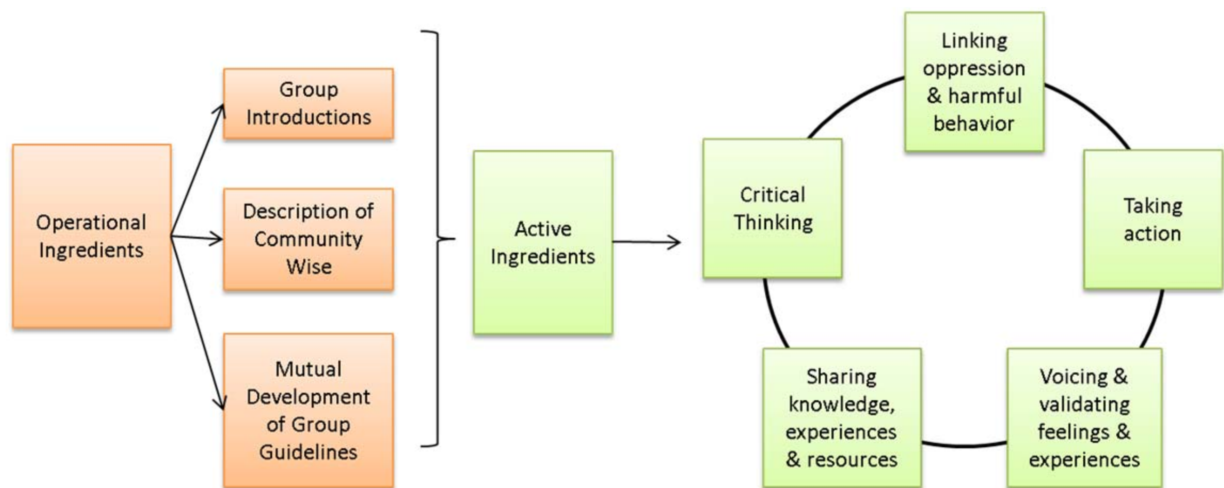

Figure 1. Community Wise's Mechanisms of Change.

The active ingredients of Community Wise comprised activities that seemed to impact the development of critical consciousness and distal outcomes. These activities included 1) critical thinking; 2) identifying and discussing the link between oppression and harmful behavior; 3) taking action; 4) voicing & validating each other's feelings and experiences; and 5) sharing knowledge, experiences, and resources. Figure 1 displays *Community Wise's* mechanisms of change.

Critical thinking involved the group participants questioning information and examining the quality of their own thinking process, often as a result of the homework assignments (e.g. reading an article about Crack Baby syndrome or researching and questioning HIV conspiracy theories) and the group dialogue. In thinking critically, participants linked structural oppression to their behavior and means of coping. For example, in the women's group, participants discussed the article about crack baby syndrome and whether or not it is a real problem. Before reading the article, the group shared their experiential knowledge about this topic, with many women describing the sick babies they met in their lives. Then, they read the article and posed critical questions (e.g.: How do you know what you know is true? What information is more reliable: Scientific? Experiential? Coming from authorities?). The discussion finally culminated with the question: What are the consequences if I believe that the crack baby syndrome is true? And what are the consequences if I believe it is not true? The group engaged in a deep discussion about the role of racism, stigma, and classism in the production of knowledge and how these macro level issues impact their individual beliefs and behaviors.

Understanding and identifying the role of oppression was stressed by the group facilitators throughout the sessions. The homework, exercises and prompts from the facilitators and one another encouraged participants to connect the role of oppression to the choices that they make in relation to substance use, HIV/HCV risk behavior, and reoffending. For example, in reacting to an illustration of a person of color engaging in harmful behaviors, one participant described how the negative image he has of himself in society makes him want to drink. He explained,

"…to keep certain images out of my mind and by the time they added all up you know, they may not be all of them mirrors but there's a couple of them mirrors, not really proud of it, and in my mind it's like well don't think about that and my weakness was just, well you won't really have to think about it if you just have a few more drinks, you know?"

Taking action is another active ingredient that seemed to impact critical consciousness and distal outcomes among participants. Throughout the group sessions, participants were encouraged to respond to their experiences of structural oppression by taking action against it. They were encouraged to do this by setting and talking about personal goals and by organizing a capacity building project amongst themselves. For example, one of the participants described how no matter how hard he tries he can't find employment: "I filled out 1,000 applications, no exaggeration…" The participants in this group eventually agreed to create a community garden where they would grow vegetables and sell them in a farmers market. In taking action, this participant started to respond to the oppression in his life by supporting his community. Rather than harming himself, he was encouraged to work with other participants to react in a more positive and action-oriented way, creating his own employment opportunity.

Voicing and validating each other's experiences and anger related to structural oppression was another active ingredient of *Community Wise*. It allowed participants to give and receive support and to articulate experiences related to oppression that are not always acknowledged. Participants described the frustration they faced trying to achieve financial stability and shelter while having a criminal history. One participant talked about his steps to join a protest group in Newark, NJ representing the unemployed and another discussed getting denied low-income housing because they don't accept ex-offenders:

"I'm just like yesterday and today I just been like real frustrated you know because like I'm trying to do what I can to you know better myself and it's like I keep hitting brick walls…"

This participant then went on to say that he can't allow himself to act on his frustration by returning to illegal activities because that will just lead him back

to “prisons, institutions and death.” Issues related to structural oppression were also discussed from the homework assignments and activities and again, participants received validation and the freedom to express their anger in a supportive environment. In providing one another with a means to express their anger and hardships, they were able to engage in critical dialogue to develop community engaged ways to combat the oppression they were facing.

Sharing knowledge, experiences and resources served as an additional way of responding to oppression, this time by empowering one another and exchanging information. Perhaps as a result of talking about the oppression in their lives and supporting each other throughout the group sessions, participants began working together to share resources and knowledge they had about jobs, social service benefits, housing options and other useful resources with one another. They also began using one another as resources, supporting each other through the challenges they went through during the week. As the weeks went on, participants worked together as a team, not just on the capacity building projects but also to support one another individually to make better choices related to their health and behavior. For example, participants encouraged each other to avoid substance use and other harmful behavior, asking that they call other group members before engaging in risky behavior, rather than after. One participant in the women’s group talked about how she has been thinking about calling the co-facilitator who attends 12-step meetings and that she was contemplating going back to meetings and “getting clean” again:

“I know meetings work for me, they kept me clean for multiple years, over a decade. So I know that but I dunno, I just know I’ve got new hope with going back to work and getting a pay check like I used to get before I got fired I got a pay check so I’ve got a little renewed hope.”

In getting her basic needs met (e.g. obtaining a job), this participant expressed being more motivated to stop using substances. The group encouraged this participant to reach out to them and to use resources in the community, such as a detox center and 12-step meetings.

While the ingredients appeared to work and affect change in two of the groups, they did not work as well in the third. This may have been due to the facilitator’s failure to establish a belief in the group’s ability, such as their capacity to create and follow group guidelines. Also, critical thinking was not explained well by this facilitator as a means to recognize oppression and the link between oppression and harmful behavior was not well established. These issues may have had a negative impact on the ingredients’ ability to affect change among the participants in this group.

Discussion

Findings from this process evaluation showed that *Community Wise* was acceptable to individuals with a history of substance abuse and incarceration residing in a distressed community. Participants found the intervention useful and process measures revealed strong alliance and a high retention rate in the intervention, considering this is such a hard to reach and hard to engage population (18, 27). Overall, the results suggest that participants were able to engage in treatment and viewed the intervention as beneficial, despite the multiple challenges they face (e.g. homelessness, unemployment, poverty).

Analysis of process measures indicated a high level of satisfaction with *Community Wise* through high scores in working alliance and group climate. Participants reported finding the intervention useful and reporting intent to use the skills they learned in the *Community Wise* groups (18). *Community Wise* retention rates were higher than retention rates reported in the literature from evidence-based substance abuse treatment evaluations with substance abusing individuals. Specifically, 70% of *Community Wise’s* participants successfully completed treatment. Literature reporting findings from cognitive behavioral therapy evaluations with this population reveal an average of only 58% completion rates (28, 29).

The mechanisms of change identified in the qualitative analysis indicated key operational and active ingredients that, when implemented by the facilitator according to the *Community Wise* manual, seemed to affect change among the participants. Some of these activities, however, were not implemented as well as they could have been. For example, the facilitator in the third group did not implement the

group introductions, critical thinking or group guidelines activities as indicated in the manual. Other problems with activities consisted of issues with the intervention itself. The NCCB worked together to modify *Community Wise* in order to resolve these issues.

For example, the "taking action" mechanism of change activity of engaging in capacity building projects still needed further development. Participants encountered challenges when developing and implementing the capacity building projects, likely causing frustration, and it was difficult to measure the impact of these projects on the community. Initially, the capacity building projects were designed to be individual projects. Approximately 3 weeks into the intervention, we realized that these should be group projects for several reasons: First, critical consciousness is developed through dialogue and group work. The focus must be on process and on the skills that are learned and developed collectively by the groups. Thus, we changed the rules midway and allowed the groups to develop group projects. The next challenge happened when participants started to develop very large ideas and struggled to break them down into small, accomplishable steps. By the time the groups were finally able to agree on a small and feasible project, the groups were ending. The capacity building projects are supposed to help participants learn group working skills, connect with others in their communities, and feel proud of the community work they accomplish. In this formative evaluation however, only one group was able to develop and implement a capacity building project.

In addition to problems with the capacity building projects, qualitative analysis of video sessions indicated a lack of content specific to sexuality issues and challenges with the design of capacity building projects. It is likely that these weaknesses in the manual are at least partially responsible for the lack of significant changes in HIV/HCV risk behavior (see the Lessons Learned/ Manual Changes section below). Due to methodological limitations (e.g.: lack of a control group), it is not possible to conclude that the intervention caused the changes in outcomes. However, pre- to post-intervention changes in outcome measures seem to indicate that *Community Wise* has the potential to be helpful as indicated by many favorable outcome changes in the expected direction. Small to large positive effect sizes were found for the overall sample in all of the outcomes. Findings were especially promising for substance abuse and reoffending outcomes as many of these variables reached statistical significance despite the small sample. However, no statistically significant changes were found in HIV/HCV risk behaviors. These findings replicate results from *Community Wise's* cohort 1(16).

Lessons learned/manual changes

Once the process evaluation data analysis was completed, findings were presented to the NCCB and discussed to determine implications and future steps. The NCCB agreed to meet for a retreat in which changes to the manual, guided by the research findings and by NCCB's experiential knowledge, would be discussed and implemented. The NCCB agreed to increase the number of sessions from 12 to 15, with two of the additional sessions dedicated to discussions about the capacity building projects and one session focused on sexuality. The goal of the sexuality session will be to explore homophobia and sexism as forms of oppression and to understand the impact of this oppression on behavioral health and HIV/HCV risk behaviors.

The NCCB also spent a great deal of time discussing the capacity building projects. Members agreed that capacity building projects must focus on process, rather than project outcomes, with step by step guidelines on how to best research and implement goals. The projects must be feasible and accomplishable in a short period of time. We are currently developing the model that participants will follow as they engage in their capacity building projects.

Conclusion

While data provides evidence indicating that *Community Wise* is a promising intervention, formative evaluation indicates that future development and research is needed to test the mechanisms of change and the real effect of *Community Wise* on distal and proximal outcomes.

Funding is currently being sought to conduct a randomized clinical trial to test the efficacy of the revised manual of *Community Wise*.

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