Targeting Consumers in the Early Stages of Substance Use Treatment: A Pilot Study

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**Objective:** Engaging persons with co-occurring disorders in substance use treatment presents a significant challenge for public mental health service providers. Standardized, user-friendly guidelines may have great benefit for community mental health outreach staff working with individuals with co-occurring disorders. The purpose of this study is to describe the impact of a brief, structured goal development curriculum (“Fresh Start”) on clinicians’ motivational interviewing skills and to assess clinician and consumer satisfaction with the curriculum. **Method:** Four clinicians, each working with 3–4 consumer participants, were assessed with the Yale Adherence and Competency Scale prior to and during use of Fresh Start to determine improvements in motivational interviewing and goal setting. Consumer participants were assessed in brief qualitative interviews to assess satisfaction. Chart-review of routinely collected substance use data was used to assess reductions in use. **Results:** Clinicians demonstrated high ratings in relational motivational interviewing skills at baseline which were maintained at study conclusion. Clinicians had lower technical motivational interviewing skills at baseline and made modest improvements in motivational interviewing techniques targeting increasing change talk. Fresh Start participants completed an average of 10 sessions (SD = 2.35). Among the 16 consumers who volunteered to participate in using the Fresh Start curriculum, 12 finished the program and 9 decided to reduce use and composed a sobriety plan. **Conclusions and Implication for Practice:** High rates of completion indicate acceptability of the curriculum and feasibility for implementing the program in a community setting. Short, goal-setting interventions are needed and under proper conditions may be teachable in vivo.

**Keywords:** co-occurring disorders, treatment guides, motivational interviewing, early treatment stages, goal setting

Motivational interviewing skills underpin a range of interventions for substance use disorders. Motivational interviewing has strong empirical support for enhancing treatment engagement and reducing substance use among persons with a substance use disorder and co-occurring mental illness (Bien, Miller, & Boroughs, 1993; Brown & Miller, 1993; Clarke, Oades, Crowe, & Deane, 2006; Miller, Benefield, & Tonigan, 1993; Saunders, Wilkinson, & Phillips, 1995). It has also been shown to work through using a counseling style marked by nonconfrontation, collaboration, and support for client autonomy. Motivational interviewing relies on strategies designed to target both relational dimensions of care and “technical” dimensions theorized to foster motivation and change clients’ perspective on their substance use (Miller & Rose, 2009). Competence in both kinds of strategies is necessary to promote behavioral change. The technical components of motivational interviewing, for example facilitating discrepancy, are particularly effective in brief interventions. (Moos, 2007; Whitlock, Polen, Green, Orleans, & Klein, 2004).

As evidence of the efficacy of motivational interviewing has grown, so, too, have training resources for clinicians. Textbooks, training manuals, and online support are available for counselors and working with people who have a substance use disorder and for supervisors (Center for Substance Abuse Treatment, 2006; Drake, O’Neil, & Wallach, 2008; Martino & Arnaout, 2010; Martino et al., 2006; Miller & Rollnick, 1999–2011; Rosengren, 2009). There are, however, few guides for community mental health outreach staff who are working with persons with co-occurring disorders. Community outreach staff report particular challenges working with individuals with co-occurring disorders who are not yet committed to reducing use (McHugo, et al., 2007; Padgett, Henwood, Abrams, & Drake, 2008).

Unlike individuals seeking substance use treatment in the general population, persons with co-occurring severe mental illness (SMI) often receive treatment within a context that historically has
not included substance use counseling. To support substance use behavior change among persons with SMI, staff need to be comfortable raising the issue of use and adept at using motivational techniques with individuals whose sense of what is possible often has been diminished as a result of social disadvantage, including histories of chronic homelessness, poverty, and trauma (Corrigan, McCracken, & Holmes, 2001; Hopper, 2007). Standardized, user-friendly guidelines for staff working in community mental health may have great benefit to keeping individuals in dual disorder treatment and reducing use.

The purpose of this article is to report on an exploratory study of a brief four-topic curriculum-based intervention for co-occurring disorders (called “Fresh Start”) that includes goal development, education about co-occurring disorders, and motivational interviewing, in a public funded mental health setting that provides community outreach. The pilot evaluated (a) clinicians’ skillfulness in helping consumers develop set goals and use motivational techniques; (b) whether these skills translated into changes in consumers’ engagement in substance use treatment and desire to cut down or stop using; and (c) consumers’ and clinicians’ satisfaction with the program.

Method

Site of Study

An open feasibility trial was conducted with a Community Support Outreach Treatment team at a large, urban psychosocial rehabilitation agency in Chicago serving persons with severe mental illness (SMI). The five-person outreach team worked on Chicago’s south side to provide a range of psychosocial treatments. Study participants included both staff and consumers. The study was reviewed and approved by the agency’s Institutional Review Board.

Participant Population

Clinician participants. Four clinicians (two outreach staff and two team leaders) from the five-person outreach team volunteered to be trained in the Fresh Start program. The clinicians had an average of 6.7 years (SD = 10.27) at the agency and an average of 18 years of education (SD = 1.2). Four clinicians implemented the program with 16 consumers with co-occurring disorders.

Consumer Participants

Consumers with an active SUD were eligible for the study and were initially approached by their case worker, and then by an RA who explained the study in more detail and obtained written consent from them. Over the 18 months of the study, 16 individuals participated in the Fresh Start program. Twenty-two were approached to participate in the study, and 16 agreed to participate. Table 1 provides a summary of participants’ demographic and clinical characteristics. On average, consumers had been receiving services at the agency for a number of years (LOT = 5.59; SD = 4.59). Fifty percent (n = 8) reported early initiation of personal and ongoing family use at intake. Six had an alcohol use disorder, four had a drug use disorder, and six had a diagnosis of poly substance use. Table 1 displays sample demographics.

Fresh Start was conceived as a curriculum-based (i.e., including handouts and worksheets for participants), time-limited intervention for consumers with co-occurring disorders. The curriculum aims to support staff in setting and working toward goals, providing psychoeducation about substance use and mental illness interaction, and then instilling motivation to address substance abuse by developing discrepancy between the attainment of the goals and the interfering effects of substance use. The program manual recommends that sessions be provided on a weekly basis during hour-long group or individual sessions, with attention to bridging in-session work to real-life contexts, including work toward personal goals (Mueser, Gingerich, & Cunningham, 2007). The curriculum supports staff in two ways. First, it facilitates conversations about substance use using a collaborative approach to psychoeducation. Second, the curriculum includes motivational exercises based on the principles of motivational interviewing.

The program is organized around a series of motivational exercises which progressively lead consumers to identify their own reasons to reduce use. Over the course of four topic areas, the program builds toward a final session in which consumers decide if they want to reduce or stop using (see Table 1). In short, the program guides in-session conversations between clinicians and consumers, relies on in-session handouts and homework assignments, and overall serves to help staff consistently use motivational techniques.

The lead author of the Fresh Start program conducted 2-day training with the entire outreach team, as well as the Director of Integrated Dual Disorders Treatment (IDDT) services. The IDDT Director and Fresh Start trainer then provided weekly supervision to the four clinicians implementing the program. After the training, the trainer and the on-site consultant conducted weekly 1-hr, client
centered case consultation with the clinicians. Participation was not incentivized.

**Measures**

**Clinician skill measures.** Clinician skill was evaluated against two subscales in the Yale Adherence and Competence Scale, second edition (YACSII), a compendium of eight scales measuring fidelity to commonly used substance use counseling skills, such as cognitive–behavioral therapy and general support (Carroll, 2000). Of the eight YACS scales designed to measure clinical competencies, the nine-item Motivational Interviewing scale and the Overall therapist skillfulness rating were chosen because of their alignment with the skills involved in delivering Fresh Start. The “Overall Skillfulness” scale measures therapist competency in the underlying spirit of motivational interviewing, including being collaborative, respecting the client’s autonomy, and maintaining a nonconfrontational stance. Skill level ratings refer to the adequacy with which a technique or intervention was done. For example, a rating of 1 on the skill level scale translates to *very poor*, which means that a therapist handled a skill in an “unacceptable, even toxic manner,” while a 7 means that a therapist was *excellent* and used a skill with a high level of mastery. The YACS was chosen for its use in other substance abuse research studies and strong psychometric properties (Corvino et al., 2000).

To supplement the YACSII items, adherence to the Fresh Start curriculum was also measured by tracking digressions from the topic and prescribed session agenda. Digression was measured by frequency and duration (in minutes) of clinician initiated discussion unrelated to the session agenda. Finally, skill was measured by changes in missed opportunities to apply or use a technique. A missed opportunity to use a technique was identified and classified as such if a clinician did not respond to the consumer using an indicated technique or intervention. Two research assistants were trained according to the protocol specified by the YACSII manual and on qualitative interviewing techniques. Research assistants (RAs) first read through the YACSII manual, watched the training video, which included both a didactic portion and a demonstration of how to consensually rate sessions. The raters rated videorecorded sessions from the training video, comparing their ratings to the expert ratings in the training video. In addition, RAs had an opportunity to rate 10 sessions of pilot data with the lead author from a sample representative of the study sample. Raters were given individual feedback on their ratings, and after rating 10, 15–30 min sessions, significant differences in ratings had been eliminated. Raters used a detailed rating manual that included YACs guidelines, score sheets, and decision rules that emerged from rating the 10 pilot sessions. RAs received a total of 35 hr of training.

Fresh Start clinicians recorded four baseline sessions and all of their Fresh Start sessions using an Olympus digital audio recorder. Over the course of a 16-month implementation period, clinicians sent the xD digital audio cards containing their recordings to the RAs. Using Olympus DSS software (DSS Software enables download of voice files recorded with Olympus recorders to playback on a PC), the RA uploaded the sessions into the DSS media player. The RAs randomly chose sessions from each clinician–consumer dyad that corresponded to the four Fresh Start topics. In total, 64 sessions were rated. Audio recordings were coded to evaluate motivational interviewing skills, digressions from topic, and missed opportunities.

**Consumer outcomes measures.** Decisions by consumers to reduce use were collected from chart review. A decision to reduce use was operationalized as having created a plan to stop using and recorded as a dichotomous variable. Clinician-administered substance use ratings were collected from the electronic medical record. Research staff recorded ratings that were completed 1–3 months prior to FS start and 6–12 months after its completion. Clinicians used the Clinician Alcohol Use Scale, Revised (AUS,R) and the Clinician Drug Use Scale, Revised (DUS,R; Mueser, Noordsy, Drake, & Fox, 2003) to assess substance use over the prior 6-month period. The scales are derived from the *DSM–IV* diagnostic criteria for substance abuse and dependence. For both scales, a rank score of 1–5 corresponds to severity of use (1 = abstinent, 2 = use without impairment, 3 = abuse, 4 = dependence, 5 = dependence with institutionalization). The scales were designed to rely on multimodal data and have been found reliable and valid (Drake, Rosenberg, & Mueser, 2007). The original scales have good test–retest reliability (Drake, Mueser, & McHugo, 1996).

Stage of Substance Abuse Treatment was rated using the Substance Abuse Treatment Scale, Revised (R-SATS; Mueser et al., 2003). The original SATS has acceptable psychometric properties and is widely used in IDDT studies (McHugo, Drake, & Burton, 1995). The R-SATS is structured in eight successive stages (preengagement = 1, engagement = 2, early persuasion = 3, late persuasion = 4, early active treatment = 5, late active treatment = 6, relapse prevention = 7, remission or recovery = 8), and measures change in engagement by looking at behavioral indicators of investment in treatment.

**Consumer and staff satisfaction measure.** Two primary qualitative outcomes were assessed through short, semistructured interviews: (a) consumers’ satisfaction with Fresh Start, and (b) staff perceptions of the program, particularly in terms of their comfort discussing substance use. The interview questions followed a funnel structure, with increasingly more targeted questions regarding specific areas of satisfaction. The first question asked about what feedback staff and consumers had about the program, and the last set of questions focused on particular areas, such as the content and structure.

**Data Analysis**

Descriptive statistics were used to analyze community outreach staff and consumer demographic information as well as to report clinical skill at baseline and at the end of the Fresh Start (FS) program. Mean YACS ratings for motivational interviewing skills are reported for baseline sessions (pre-FS) and for the last Fresh Start session for four clinicians each of whom were using the curriculum with 3–4 consumers. Finally, we used a paired *t* test analysis to evaluate changes in substance use ratings for those consumers who created a sobriety plan, using ratings completed by clinical staff 1 to 6 months prior to FS and 1–6 months post-FS. Descriptive analyses were used to characterize how many participants indicated they wanted to reduce use and their substance use outcomes at 6 to 12 months follow-up.

Simple content analysis was conducted by two independent raters (SK and KD) to identify commonly referred to themes in the
semistructured interviews assessing client and consumer satisfaction. The questions targeted general satisfaction with and perceptions of the curriculum as compared with business as usual sessions, for example, “How would you describe the difference between a Fresh Start session and other visits?” Interview questions guided a priori thematic analysis of the clinician and consumer data.

Results

Fresh Start participants completed an average of 10 sessions (SD = 2.35). The average time to complete the program was 8 months. Table 3 displays the average number of sessions per topic. Of the 16 consumers who volunteered to participate, 12 completed the Fresh Start program, eight decided to reduce use and developed a sobriety plan, and four consumers did not choose to reduce use.

Clinician Skill Outcomes

Clinician skill improved on the “overall skill” scale as well as on four motivational interviewing items that comprise the motivational interviewing scale. “Overall skill” is included in the YACS as stand-alone scale reflecting overall clinician competency. Clinicians improved on this scale between baseline (and the final four motivational interviewing item, which measures overall motivational interviewing competency). Clinicians received high ratings on both open-ended questions and reflective statements at baseline, ratings which were maintained while using FS (see Table 2). Clinical strategies to elicit change talk showed positive change. As Table 2 shows, affirmations of strength and motivation to changes, and use of pro–con interventions were particularly impacted. In addition, the percentage of missed opportunities to use an important skill or strategy decreased by 15% between baseline and the final sessions of FS use.

Consumer Outcomes

Twelve of the 16 consumers completed the curriculum. Of these 12, eight created a sobriety plan to reduce use, and six of the eight succeeded in decreasing their use of either drugs or alcohol. For these six, the average AUS rating decreased from 3.17 (SD = 1.17) at baseline (0–3 months prior to starting Fresh Start) to 2.8 (SD = 1.17) at follow-up (6–12 months post-Fresh Start), t(5) = .79, p = .45. The average DUS score for the group decreased from 2.33 (SD = 1.51) at baseline to 1 (SD = 0) at follow-up (6–12 months post-Fresh Start), t(5) = 2.2, p = .08. A concurrent increase on the SATS from a baseline average of 3.8 (SD = 1.3) to 4.00 (SD = 1.7) at follow-up, t(5) = 0, p = 1.

Consumer and Staff Perceptions and Satisfaction With Fresh Start

Consumers. The five consumer participants interviewed expressed satisfaction with their participation in the Fresh Start program. Of these five, four had decided to cut down. Overall, participants had positive assessments of the program. One participant said that he liked the curriculum because, “it . . . gave me a chance to look at myself and analyze you know, and try to change myself from what I—different things that I was doing.” In addition, each of them noticed how Fresh Start was different from case management. They described what were referred to as regular visits in the following terms: “check-in,” “sitting and talking,” “discussing housing,” “assistance with shopping,” “medication monitoring,” “supporting daily living skills,” “budgeting,” and “money management.” And they described Fresh Start sessions variously as “answering personal questions,” “discussing feelings, habits, mental health, and substance use,” “a chance to analyze self and change,” and “setting goals.”

Consumer participants reported focusing on goals outside the session in a way that made them feel more hopeful. In response to a question asking her to compare her goal work prior to Fresh Start with the door for tomorrow. So that’s what we were working on—opening

Table 2

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<tr>
<th>Motivational Interviewing Skill Items: Skill Level Baseline-Fresh Start Use</th>
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<td>MI item</td>
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<td>Motivational interviewing skill</td>
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<td>Open-ended questions</td>
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<td>Reflective statements</td>
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<td>Affirmations of strength</td>
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<td>Fostering a collaborative atmosphere</td>
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<td>Motivation to change strategies</td>
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<td>Pros/cons</td>
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<td>Heightening discrepancies</td>
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Note. Mean scores are calculated from ratings for four baseline sessions that four clinicians conducted with one consumer each (four sessions) and for a total of 12 final sessions that the four clinicians conducted with three consumers each (12 sessions). Sessions were scored using the YACS “Motivational interviewing” sub-scale ratings: 1 = very poor, 2 = poor, 3 = acceptable, 4 = adequate, 5 = good, 6 = very good, 7 = excellent.
the door for tomorrow . . . make life a little bit better by dreaming something and doin’ something.

Staff. Staff indicated that it was hard “to get started with it,” especially after a consumer had missed several appointments or time had elapsed between sessions for other reasons. They also indicated that it was difficult to work Fresh Start sessions into their schedules when they were busy.

What I found that didn’t work well was that once someone said that they weren’t interested in cutting down their use, we were supposed to continue to reengage and create discrepancy. This is a good idea in theory, but I felt that it made people shut down and begin to avoid the visits.

Another staff indicated that the manual facilitated bringing up and talking about substance use:

I think what worked well in terms of engaging consumers (sic) around their use was the nonjudgmental tone of the manual. By using the manual, it was easy to normalize use.

Discussion

The use of a standardized, user-friendly guide to brief motivational interventions fills a significant service gap. Fresh Start structures conversations between clinicians and consumers around substance use, goals, and how substance use is interfering with reaching goals. Despite clinician turnover (the team leader) and the introduction of a team leader new to clinical work, all 15 of the 16 study participants finished the program, at least up to the point at which they had to decide to reduce or continue use. High rates of completion indicate general tolerance and acceptability of the curriculum and the feasibility of implementing the program in a community setting.

Clinician skills showed moderate improvement between baseline treatment as usual sessions and the last Fresh Start session. Skills targeting change talk between baseline, and implementation of Fresh Start improved, particularly heightening discrepancy and pro–con analysis. Among the 15 consumers who volunteered for Fresh Start, nine decided to reduce use and completed a sobriety plan, and one participant remained undecided. Five participants elected not to reduce their use. Both staff and consumers found the curriculum useful. Staff indicated it made it easier to raise the issue of substance use although staff also indicated that it was difficult to use on a consistent schedule due to their other case management responsibilities.

The moderate changes on the YAC’s items may be due to consumers’ self-reported long histories of use with many indicating substance use initiation in early adolescence at intake. Additionally, the history of the relationship between staff and consumers may have made it difficult for newly trained staff. Traditionally, outreach staff have not offered substance use counseling interventions and were doing so for the first time for this study. Although the intervention may have helped staff learn how to feel more comfortable engaging in conversations with consumers about their substance use (i.e. what they liked and did not like about it, what might be different if they reduced or quit using, and what was difficult about stopping substance use), consumers may not have been as receptive to these conversations which they may have perceived as out of the ordinary (Joyce & Showers, 2002). That is, insofar as in-depth conversations about substance use were not common place, consumers’ response to them might have undermined clinicians’ nascent skills and sense of self-efficacy. Finally, many Fresh Start sessions were not conducted, despite clinicians’ best intentions, as discrete, stand-alone sessions. Instead, because of pressing needs of study participants in a real world setting, Fresh Start was provided in addition to helping members address pending crises, such as disagreements with landlords or problems with basic necessities. As a result, sessions focusing on substance use alone did not occur as often or for as long as may be necessary to consistently work toward goals.

Study limitations include: (a) lack of generalizability, (b) unequal sample sizes between baseline and Fresh Start sessions, and (c) insufficient follow up time to measure behavioral change outcomes. The lack of a control group limits what can be said about the program’s effectiveness. However, the clinicians, consumers, and setting are representative of community mental health centers and show that the program successfully can be implemented and retain consumers. Fewer baseline sessions were recorded than Fresh Start sessions, which limited the analyses that could be conducted. Finally, behavioral change—both changes in substance use and adopting new clinical skills—takes time and does not generally occur in a linear process. In order to capture, the nonlinear growth reporting on more data points with more participants might be necessary. Despite these limitations, these prelim-
inary findings suggest that it is feasible to use a brief goal setting intervention, and offers ways in which it might be implemented more effectively. Individuals with co-occurring disorders pose unique challenges for community mental health staff, challenges that the Fresh Start program addresses through structuring how clinicians help consumers identify and develop goals of and create discrepancy. Eliciting personally meaningful goals and supporting their pursuit connects clinicians to the consumers' world and provides leverage for change talk (Schout, de Jong, & Zeelen, 2010).

References


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