An Alternative Program for Methadone Maintenance Dropouts: Description and Preliminary Data

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Abstract

Time in drug treatment has been shown to be one of the best predictors of post-treatment success. Since as many as half of the enrollees leave methadone treatment during the first year, the project described in this article was designed to test the effectiveness of an alternative program for individuals who have recently dropped out of methadone maintenance treatment. The goals of this “Alternative Program” are to help participants re-connect with formal drug treatment and other community or medical programs, reduce their HIV risk behavior, decrease or eliminate drug use, join self-help groups, and obtain entitlements. Program components include: contacts by local outreach workers, cognitive-behavioral relapse-prevention group counseling, and individual counseling for needs assessment and referral. This paper describes the basis for development of the intervention, summarizes the methodology being used, and provides preliminary data on participation in the Alternative Program.

Key Words: Substance-related disorders, methadone, substance-abuse treatment centers, patient dropouts, methadone maintenance.

Introduction

While time in drug treatment has been shown to be one of the best predictors of post-treatment success (1), as many as half of the enrollees leave methadone treatment during the first year (2). Other forms of treatment, such as Therapeutic Communities (TCs), a type of drug-free residential treatment, have even higher dropout rates early in the treatment process (2). Individuals who have dropped out of drug treatment may still wish to change their behavior but may have decided that the drug abuse treatment they received was not helping them to do so. Or, in line with the Transtheoretical/Stages of Behavior Change Model (3), these individuals may be in early stages of change, but not yet ready to maintain new behaviors. Therefore, these individuals may be good candidates for a tailored intervention to advance them along the continuum of change.

Little is actually known about individuals who exit drug treatment prematurely. A search of the literature reveals a paucity of reports involving those who drop out, or who fail to complete drug abuse treatment. Maddux and Desmond (4) reviewed the literature and found five long-term studies of persons who had dropped out of methadone treatment and six long-term studies of those who had dropped out of outpatient drug-free treatment. In their review, they report that while methodology, definitions of abstinence, and follow-up periods differed among the studies, the percentages found to be abstinent post-treatment ranged from 9–21% for the methadone studies and 10–19% for the drug-free outpatient studies.

There are few studies which inquire into the reasons for terminating treatment. Similarly, there are few reports of programs developed to
re-engage or re-enroll those who drop out. Zanis et al. (5) reported on the success of telephone follow-up to those who had left a methadone program. An enhanced counseling session plus one or more telephone calls to persons who had left treatment up to one year previously resulted in a significantly greater return to treatment for the group called and counseled than for a control group (63% vs. 7%, p < 0.01) who did not receive such a session or follow-up call. Although the sample size in this study was small (n = 41), the findings indicate that efforts to contact dropouts may be effective in re-engaging them in drug treatment.

**Goals of the Project**

This study was designed to test the effectiveness of a program (referred to as the Alternative Program) for people who have recently dropped out of methadone maintenance treatment. The primary goal of the Alternative Program is to reconnect subjects to formal drug treatment and other community or medical programs. Other goals are to reduce HIV risk behavior, reduce or eliminate drug use, and assist in obtaining entitlements. The components of the Alternative Program include: outreach by local workers, a cognitive-behavioral relapse-prevention group-counseling strategy, and individual counseling for needs assessment and referral. This paper will: (a) describe the basis for development of the program; (b) summarize the methodology being used; and (c) provide preliminary data to assess whether methadone maintenance treatment program (MMTP) dropouts can be engaged in the Alternative Program.

**Development of the Intervention**

Since there were no reports in the literature on programs specifically designed for drug treatment dropouts, other sources were used as the basis for the design of the Alternative Program for dropouts from methadone maintenance. Sources included studies of (a) the effectiveness of local outreach workers in engaging out-of-treatment drug users (6); (b) the utility of the Transtheoretical/Stages of Change Model (3) in explaining health behavior change and gleaning messages to the individual’s “stage” of behavior change; and (c) the use of cognitive-behavioral relapse-prevention strategies for developing skills which can assist in recovery.

**Role of Local Outreach Workers**

The incorporation of an outreach component to engage drug treatment dropouts in a change process is an important and innovative component of the Alternative Program strategy. The rationale for this is based on the success of two types of outreachs. The first is community outreach, which has been used with increasing frequency after its demonstrated success in helping out-of-treatment drug users to modify their HIV risk behaviors including drug use itself (6–12). The studies describe how persons who were engaging in high-risk HIV-related behaviors reduced the frequency of these actions when they were approached in a non-threatening manner in their own neighborhoods by former drug users and others trained in street outreach methods, including the provision of information and materials (e.g., bleach kits and condoms) for risk reduction and referrals for needed community services. Among the behavioral changes made by addicts were: decreased sharing of injecting equipment, increased use of bleach to clean syringes, reduced frequency of injection, reduced number of sex partners, and increased use of condoms.

A second type of outreach has been utilized with success, in developing countries as well as in urban and rural areas of the U.S., to provide preventative health services. In this model, the outreach worker is usually responsible for contacting or visiting an assigned group of individuals. This method forms the basis for the training and activities of the barefoot doctors in China, TB workers and sexually-transmitted disease (STD) case workers in U.S. cities, and workers who make home visits to new mothers of high-risk infants. In these instances, the outreach worker, who is similar to the people being served, is responsible for his/her group members or caseload. The outreach worker helps the individual members of the group take specific preventive health actions. While this outreach model has not been fully developed in a theoretical framework in the U.S., elements of this role are found in the description of family health workers, neighborhood residents who were attached to health teams at community health centers in the 1960s and 1970s (13, 14). The family health worker model was developed for and used successfully in poor urban neighborhoods.

In the Alternative Program, the role of the outreach worker incorporates elements of both
the street outreach worker role and the family health worker role. Several of the characteristics of outreach make it an ideal method for reaching persons who are suspicious of or uncomfortable in an established treatment system. These include:

- emphasis on non-judgmental approach
- operation outside the “system”
- location in the person’s own neighborhood
- use of local individuals, including ex-addicts and others familiar with the community
- use of persuasion instead of penalties
- provision of a link to tangible services
- participation in guiding the pace of the intervention

The use of outreach methods has proven to be an acceptable format for receiving both new information and assistance in implementing behavior changes, even in communities with problems such as low literacy and extreme distrust of formal agencies.

**Theoretical Framework**

*Stages of Change Model*

Several theoretical and practical models were incorporated into the Alternative Program. The Transtheoretical Model/Stages of Change (3), which posits that a person goes through precontemplation, contemplation, preparation, action and maintenance stages when making a health behavior change, holds great promise for assisting in a change process for drug abuse treatment dropouts. The model has been applied successfully to smoking cessation, to HIV risk behaviors, and recently to treatment of cocaine abusers (15) and methadone maintenance patients (16). The first step in using this model is recognition by staff that the persons they wish to engage are likely to be at different stages on a continuum of change. “Readiness for treatment” has proven to be a good predictor of success in residential drug treatment (17) and may prove to be a good predictor of future action for other groups of drug users (18).

In the Alternative Program, the clients’ stage of change guides the outreach workers and the counselor in their choice of messages. For example, in approaching pre-contemplative clients, the worker bears in mind that clients are not ready to “solve their drug problem,” but may welcome “harm reduction” messages about going to a needle exchange, or bleaching syringes for the purpose of reducing or eliminating risks associated with sharing used needles. Once they have reached the contemplation stage, they may be willing to begin talking to a counselor about other kinds of change.

*Relapse Prevention Model*

One model borrowed from the treatment system is that of relapse prevention. Relapse prevention (19) is a widely used cognitive-behavioral skills training approach to achieving and maintaining abstinence from drugs and alcohol. In general, it consists of the following elements: (a) providing information about the biological, psychological, and social effects of addiction and recovery; (b) identifying high-risk situations and early signs of relapse; (c) developing various skills (including coping skills for achieving abstinence, behavioral skills for substituting drug-free behavior for drug use, cognitive skills such as thought stopping and cognitive restructuring for overcoming drug cravings, and affective skills for labeling and expressing emotions); (d) increasing perceived self-efficacy, to achieve and maintain abstinence; and (e) developing new drug-free lifestyle behaviors such as self-care behaviors, hobbies, and involvement in self-help activities. The Matrix Model developed by Rawson et al. (20) is in the form of a manual and contains specific topics and exercises for use in group and individual formats.

The Enhanced Reinforcement Model (21, 22) was used as a starting point for developing the group counseling component in the Alternative Program. The Enhanced Reinforcement Model is based on the Matrix Model, which was originally designed for use with middle-class cocaine abusers. The Enhanced Reinforcement Model has been implemented in a methadone program with clients similar to those in the study target population: poor inner-city residents who practice poly-drug abuse and are subject to a host of economic and educational problems. A key element in this model is providing small but meaningful interpersonal rewards for small behavior changes in the desired direction. For example, a person who completes one week in a program, may be rewarded by having his/her name and picture placed on the roster of “week-one graduates,” or a person will receive praise from the counselor and group members when he/she postpones drinking alcohol until after the group session is over.
A premise of the Enhanced Reinforcement Model is that clients often have psychological vulnerabilities which make it difficult for them to manage their emotions and, therefore, to become engaged in counseling. These clients may react to minor slights or insults with inappropriate rage. After an intense burst of emotion, this type of client may avoid the counselor for several weeks or drop out altogether. According to Foote et al. (21), such reactions occur, in part, because of problems with the management of strong emotions, but also because the client may lack a basis for evaluating normal social relationships. In the present project, it was expected that successful engagement with an outreach worker would help prepare the client for therapeutic processes such as support groups and individual counseling. In these settings, clients receive further assistance in developing mechanisms for interpreting social cues and coping with their emotions.

Method

The dropout sample was recruited from two sources. The first of these is the Beth Israel Medical Center (BI) Methadone Maintenance Treatment Program (MMTP) Intake Center. Newly enrolled adult patients (age 18 and over) who are assigned to its Harlem clinics are interviewed by Alternative Program research staff, and consent is obtained to follow them if they leave treatment within one year of admission. Detailed locator information is also obtained, so that patients can be re-contacted. Project staff receive the identification numbers of dropouts from the BI Management Information Systems department on a regular basis. Letters are sent and, if necessary, telephone calls are made, to invite the dropouts for an interview at the project field site in East Harlem.

Despite these efforts, BI intake clients were difficult to re-contact, interview and recruit for the Alternative Program after they left treatment. In part, the difficulties encountered were due to clinic assignment procedures within the BI treatment system. During the recruitment period at BI, from July 1997 through June 1998, most of BI’s open treatment slots were at its Harlem clinics, to which patients from diverse geographic areas were assigned. When re-interviewed at the field site, many of those who had dropped out of treatment stated that the clinic was too far from home. They also chose not to participate in the Alternative Program for the same reason.

Based on pilot work during the first year of the project, we decided to conduct street recruitment in East Harlem, to find individuals who had left treatment one year ago or less. In order to assure validation of dropout status, we asked all eight MMTPs in the immediate vicinity of the field site to provide confirmation of the discharge status of their former patients. Signed consent is obtained in the street from potential subjects by the project’s outreach workers. The consents for confirmation are then faxed to the treatment programs, which generally respond within 24 hours. Recruits are asked to return the following day for a research interview. While not all recruits are confirmed, those who return for an interview are most likely to be those who have actually left an MMTP within the past 12 months. The validation process apparently discourages those who are not eligible, from returning for an interview. Using this strategy, we have been able to recruit dropouts who reside in or frequent East Harlem and who are, therefore, more likely to take part in the Alternative Program than those who were recruited at MMTP enrollment at BI. Some dropouts have already re-entered treatment by the time they are recruited for the study. These individuals are in the early phase of treatment, since by definition, they had been in treatment for less than 12 months. As such, we decided to include them in the study, and outcomes assessed for this group will include retention in drug treatment.

Eligible subjects who agree to participate sign an informed consent and are given a standardized research interview which collects information on demographics, drug use history, drug treatment history, HIV risk behaviors, attitudes toward drug treatment, and reasons for leaving treatment. All subjects are then offered an HIV test with pre- and post-test counseling. Subjects are randomly assigned to intervention or comparison groups. Those assigned to the intervention group are introduced to the program counselor and invited to a group orientation session. Those assigned to the comparison group are told that they will be invited back for a six-month follow-up interview. All subjects are subsequently contacted for six- and twelve-month follow-up interviews.

Program Description

Group Counseling

Group sessions are held four days per week. New entrants to the Alternative Program must
attend an orientation session before beginning their first regular group. Subjects may attend groups for up to three months. There is a five-dollar incentive for group attendance and a bonus of three dollars at the end of the week for those who attended all four sessions. Groups are held mid-morning and mid-afternoon. Following the Matrix and Enhanced Reinforcement Models, each group session is a self-contained written module, although some modules are related by content or theme. A total of 51 sessions from these models was modified to meet the needs and characteristics of the Alternative Program participants. These characteristics include: out-of-treatment status, low literacy, continued polysubstance abuse, and lack of immediate interest in or motivation for returning to treatment. Changes were made in terminology, and language was modified to meet the needs of individuals with low literacy levels.

Individual Counseling Sessions
Each subject who is assigned to the intervention group is offered two individual sessions with the counselor during the three months of the intervention. Other sessions are offered as crisis intervention or for referrals, on an as-needed basis. The two individual sessions have been designed in the style of the group sessions — as structured exercises. The first session includes a needs assessment with regard to several types of concrete services (food, housing, medical care, etc.); determining the subject’s perception of his/her drug problems; and estimating the subject’s readiness for return to treatment. The second session is aimed at persuading the subject to accept a referral to drug treatment if he/she has not re-entered treatment by this time. If the subject is in treatment, the aim of the session is to encourage the individual to remain in treatment and to make the best use of the services which are available through the treatment program. The second session also helps subjects make the transition to other types of groups, such as Narcotics Anonymous, support groups, or psychological counseling groups.

Outreach Strategies
To meet the objectives of this program, the outreach workers have had to incorporate several new strategies in addition to the traditional ones of harm reduction, persuasion, appeals to improve the health of the individual, personal examples of getting off drugs, recommendations to use needle exchanges, and street referrals to concrete services. In part, this is because of the dual nature of the outreach workers’ responsibilities on this project. First, the outreach workers must act as recruiters of treatment dropouts both from the BI MMTP intake sample and from the streets. Second, their deliberate contacts with the subjects are a key part of the intervention itself.

In recruiting BI MMTP dropouts, the outreach workers act as “detectives,” in that they must look for persons they have not previously met. In the street recruitment strategy, the first encounter with potential subjects is on the street, but an invitation to participate must await confirmation of their program discharge status. Since this information is not immediately available, outreach workers are deprived of one of the usual persuasive recruitment strategies, namely, offering an immediate interview followed by an immediate monetary reward. However, the strategy of recruiting a person, obtaining an informed consent for validation of discharge status, and later that day scheduling an interview for the following day has proven to be successful.

As interventionists, the outreach workers have expanded their traditional street outreach role by adding aspects of what has been called the family health worker role. Once a subject has been assigned to the intervention, he/she is contacted at least weekly by the outreach worker for one month. At first, the contacts are for the purpose of getting the subject to come to an orientation session or, if the subject prefers, a one-to-one session with the counselor. Other purposes include delivering harm-reduction messages and materials (condoms and bleach kits), offering referrals which are arranged from the field site, and encouraging subjects to attend the group counseling sessions.

Staff Coordination of Services
On a weekly basis, the counselor, HIV counselor and outreach workers meet to discuss whether any subjects in the intervention group have expressed needs for services and whether staff members have noticed any significant changes in a subject’s behavior or stage of change. If a need for services has been noted, the staff group decides who will make the referral and whether it is necessary or appropriate for someone to accompany the subject to the agency. If it is deemed
appropriate, one of the two outreach workers will accompany the client. Usually the worker chosen is the one with whom the subject has established the greater rapport.

Toward the end of the third month of the intervention, a special effort is made to persuade those who have not already resumed treatment to accept a referral to a treatment program. Those who have re-entered treatment are encouraged to make full use of the services provided by the program. Such persuasion and encouragement is a joint effort of the counselor and the outreach workers.

**Results**

*Description of Dropout Sample*

Thus far, 426 individuals have been recruited into the dropout sample, of whom 49 (12%) are BI dropouts and 377 (88%) are street-recruited dropouts. Close to half the sample (44%) had returned to treatment by the time of the initial interview. Demographic characteristics of the sample are presented in Table 1.

*Program Participation*

A total of 178 subjects were randomly assigned to the Alternative Program intervention group (see Table 2). Preliminary findings of the study indicate that the majority of MMTP dropouts could be engaged in some aspect of the intervention program. Although only 30% of the subjects engaged in all three components of the intervention (outreach, group counseling and individual counseling), almost all subjects (92%) participated in at least one component. The characteristics of those who choose to participate in the different components of the Alternative Program intervention will be analyzed to determine the impact of the intervention and its separate components on involvement in drug treatment and other programs and on drug-use behavior.

**Findings on the Utility of the Transtheoretical/Stages of Change Model in the Intervention**

The Transtheoretical/Stages of Change Model has proven to be a useful guide in implementing the Alternative Program intervention. The counselor uses the Stages of Change Model informally to give feedback and encouragement to subjects in group and individual settings. For example, rather than press those who are in denial about a drug or alcohol problem to re-enter treatment, the worker begins by providing support in an effort to reduce substance use and other problems.

Once a subject has identified a problem, the outreach worker provides concrete assistance in solving it. For example, he/she may offer to escort pre-contemplators to medical or dental treatment, or to a Medicaid or housing office. Even those who decline such assistance express appreciation for the outreach worker's interest and support.

In group and individual sessions, the counselor presents re-enrollment in drug

| TABLE 1 | Description of Dropout Sample |
|-----------------|-----------------|-----------------|
| Number | Percent | |
| Recruitment Source | (n = 426) | % |
| Program dropouts | 49 | 12 |
| Street recruits | 377 | 88 |
| Treatment Status at Recruitment | | |
| Out-of-treatment | 237 | 56 |
| Returned to treatment | 189 | 44 |
| Gender | | |
| Male | 292 | 69 |
| Female | 134 | 31 |
| Ethnicity | | |
| Hispanic | 239 | 56 |
| African-American | 106 | 25 |
| White | 77 | 18 |
| Other | 4 | 1 |
| Age (mean age = 39.6) | | |
| 20–30 | 60 | 14 |
| 31–40 | 178 | 42 |
| 41–50 | 160 | 37 |
| 50+ | 28 | 7 |

| TABLE 2 | Participation in Intervention |
|-----------------|-----------------|-----------------|
| Number | Percent | |
| Assigned to intervention | 178 | 78% |
| Had at least one outreach contact (subsequent to intervention assignment) | 138 | 78% |
| Had more than one outreach contact | 92 | 52% |
| Attended at least one group | 116 | 65% |
| Attended more than one group | 98 | 55% |
| Had both group and outreach contacts | 90 | 51% |
| Had at least one individual session | 64 | 36% |
| Had more than one individual session | 36 | 20% |
| Had at least one intervention component | 164 | 92% |
| Had all three intervention components | 53 | 30% |
treatment as a desirable goal. Re-enrollment options are explored in more detail with those who express readiness to move to the action stage. Readiness is demonstrated through such statements as “I am considering going back to the methadone program” or “I really do need drug treatment.” The counselor then inquires about the subject's preference for a specific program and offers to assist with enrollment.

Findings on the Intervention Components

Responses to the outreach and group counseling portions of the Alternative Program by clients who have taken part in them have been enthusiastic. Clients express a sense of loss when they realize that their three months in the program are coming to an end. Those who participate in the groups generally experience change, as reported by the group counselor. Initially, clients often hesitate to reveal their thoughts, feelings and experiences. As they become more comfortable, they begin to share experiences and emotions with others.

Since the group sessions are directed toward recognizing problems with substance use and overcoming these problems, discussion is focused on these areas. Some who enter the Alternative Program have already re-enrolled in treatment. However, they may still be using heroin and other substances. Those who are out of treatment are even more likely to be using drugs and/or alcohol. For example, 81% of those out of treatment reported using heroin, compared with 59% of those in treatment (p < 0.001). Few participants are solidly in the action stage of working to solve a drug problem they have acknowledged to themselves. Those in treatment are more likely to be in the preparation stage, with some acceptance of the rules of their treatment programs, but without a firm commitment to abstain from drugs. Those who are out of treatment are more likely to be pre-contemplators denying that they have a problem at all. Some out-of-treatment clients, however, are contemplators who are considering re-enrolling in treatment or using some other method to reduce or stop their use of drugs.

This client mix presents a unique challenge to the counselor. Most individuals entering drug treatment are generally prepared to proceed with treatment. Those recruited for alternative program, by contrast, are predominantly pre-contemplators. In general, those have progressed through only one stage of change during the three months of the program and are unlikely to enter treatment. Therefore, one of the objectives of the Alternative Program is to refer participants who have been socialized into the group process to various programs in the community such as Narcotics Anonymous, Alcoholics Anonymous and/or general health or mental health agencies.

Discussion

It is challenging for the outreach workers to maintain contact with clients who are often in crisis, who may be reluctant to accept referrals to services, and who are sometimes resistant to behavior change. It is especially difficult to assist clients who refuse to come to groups, are heavy users of drugs, and/or are involved in drug dealing. The most productive strategy for such individuals is to offer them harm-reduction messages and resources (e.g., for those who are drug injectors, providing bleach kits, instruction on safer injection practices, and information on needle exchanges). This "low threshold" intervention tends to promote trust and acceptance of outreach workers by the clients. For clients who are not so heavily involved with drugs but who seldom attend the groups, the outreach worker's task is to keep the individuals engaged, assist them with helpful information (for example, about food pantries, obtaining Medicaid, solving family problems, etc.) and let them know that someone is concerned about their welfare.

It should be noted that not all individuals who are selected are suitable group members. On a few occasions, individuals have had to be suspended or even terminated from the groups for misconduct, such as threatening another group member. Some individuals who have been discharged from treatment may have exhibited these problematic behaviors previously, and this may have been part of the reason for program discharge.

Conclusions

Individuals who drop out of methadone treatment can be contacted and engaged by skilled outreach workers. Effective outreach techniques include acceptance, harm-reduction messages, offers of incentives for project participation, and encouragement to use community services. More than half of these individuals will participate in a group counseling program based on a Relapse
Prevention Model if it is tailored to their needs, interests, and abilities. They will respond to a skilled and caring counselor who is trained in relapse prevention methodology and who accepts their out-of-treatment status and current drug use level. Many MMTP dropouts are still interested in change and are clearly willing to take the first steps toward recovery from drug use.

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