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Brief Family Treatment Intervention to Promote Aftercare among Substance Abusing Patients in Inpatient Detoxification: Transferring A Research Intervention to Clinical Practice

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Abstract

Two earlier studies showed that a brief family treatment (BFT) intervention for substance abusing patients in inpatient detoxification increased aftercare treatment post-detox. BFT consisted of meeting with the patient and a family member with whom the patient lived to review aftercare plans for the patient. A phone conference was used when logistics prevented an in-person family meeting. Based on the earlier research results, we trained a newly hired staff person to continue providing BFT. We monitored key process benchmarks derived from the earlier research studies to ensure ongoing fidelity in delivering BFT. This method proved successful in transferring BFT from delivery in a research study to ongoing delivery in routine clinical practice after the research ended. It also ensured that a high proportion of patients had their families contacted and included in planning the patients' aftercare.

1. INTRODUCTION

Meta-analytic reviews indicate that involving the family in the patient's treatment generally is an effective means to promote recovery from alcoholism and drug abuse (O'Farrell & Fals-Stewart, 2001; Stanton & Shadish, 1997). However, most empirically supported family treatment methods are relatively lengthy and intensive (O'Farrell, 1993). Although still relatively untested, some of the most potentially widely applicable family treatment methods involve brief intervention with family members at key times in the patients' addiction treatment to promote continued use of treatment.

Family assessment interviews to aid treatment planning in inpatient substance abuse treatment programs have been shown to improve patient outcomes in correlational and program evaluation studies (Bale, 1993; Peterson, Swindle, Phibbs, Recine, & Moos, 1994). A family meeting to convey family concerns about the patient's drinking and their desire for abstinence improved aftercare attendance following inpatient alcoholism treatment as compared with a

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non-randomized comparison group who did not get the family meeting (Ino & Hayasida, 2000).

Based on these earlier studies, we have been conducting a treatment development project to develop and pilot test a Brief Family Treatment (BFT) intervention to promote continued aftercare by patients receiving inpatient detoxification. This project follows the stage model of behavioral therapies development research proposed by Onken, Blaine, and Battjes (1997). An earlier report (O'Farrell, Murphy, Alter, & Fals-Stewart, 2007a) described Stage 1a of this project in which we developed the BFT treatment manual, treated an initial group of substance abuse patients with BFT, and compared outcomes of BFT patients with a matched, non-randomized treatment as usual (TAU) comparison group. BFT consisted of meeting with the patient and a family member with whom the patient lived to review and recommend potential aftercare plans for the patient. A phone conference was used when logistics prevented an in-person family meeting. This earlier quasi-experimental pilot study found BFT, as compared with TAU, had greater aftercare participation. The magnitude of these difference favoring BFT over TAU was midway between a medium and a large effect size.

A second report (O'Farrell, Murphy, Alter, & Fals-Stewart, 2007b) described Stage 1b of this project in which we conducted a small scale, randomized pilot study of BFT. Results showed that alcoholic patients who received BFT, as compared with a randomized TAU comparison group that did not, were significantly more likely to enter an aftercare program after detoxification. The magnitude of the difference favoring BFT over TAU was midway between a medium and a large effect size, very similar to our earlier non-randomized pilot study of BFT.

Although BFT proved effective when delivered in the context of a research project, we wondered whether BFT could be applied successfully in ongoing practice outside of a research context. Researchers often assume but frequently do not test whether treatment methods that are effective in a research study can be successfully implemented in the "real world" of routine clinical practice settings (Institute of Medicine, 1998). The present study demonstrates how we successfully transferred BFT in inpatient detoxification from delivery in a research study to ongoing delivery in routine clinical practice after the research project ended. Briefly, we trained a newly hired staff person to continue providing BFT in the same detoxification unit where the research was done and monitored key process benchmarks derived from the research project to ensure ongoing fidelity in delivering BFT.

2. METHOD

O'Farrell et al. (2007a, 2007b) provide detailed descriptions of the detoxification (detox) unit setting and the BFT intervention which are summarized here.

2.1. Study Setting

The study setting was a hospital-based inpatient substance abuse detox unit in the northeastern United States. The detox unit was part of a larger substance abuse treatment program that included a 30-day residential program, a modified therapeutic community, and an outpatient clinic. The detox unit had an average length of stay of a little over 3 days and about 850 admissions yearly. It focused on acute medical detoxification, and assessment of the patient's substance abuse and related problems. Aftercare planning involved staff members encouraging patients to consider aftercare and reviewing the options available. The study setting was chosen because the detox unit did not make a regular practice of contacting or involving patients' family members for aftercare planning or other reasons, making it a suitable unit in which to evaluate the addition of BFT.

2.2. BFT Intervention

BFT consisted of meeting with the patient and an adult family member (typically a spouse or parent) with whom the patient lived to review and recommend potential aftercare plans for the patient. A phone conference was used when logistics prevented an in-person family meeting. Specific steps in the BFT intervention were as follows: (1) Identify patient admitted to detox who is living with a family member. (2) Get patient's permission to contact family member plus name, phone number and best time to call. (3) Call family member to set appointment for meeting. (4) Meet together with patient and family member to formulate aftercare plan. (5) If an in-person meeting is not feasible, conduct a phone conference with patient and family member about aftercare options and preferred plan. (6) Help make any practical arrangements for aftercare plan. (7). Call patient and family member 2 weeks after detox discharge to find out success of and troubleshoot aftercare plan.

2.3. Translation of Research to Practice

The two pilot studies of BFT described in the introduction to this paper took place in the detox unit, respectively, over a period of 6 months from February to July 2000 and 12 months from April 2001 to March 2002. Based on the favorable results in the pilot studies, we trained a newly hired staff person who had not been involved in the research to continue providing BFT in the detox. Training consisted of reading and reviewing a description of BFT, role playing, observing one of the BFT therapists from the research pilot studies, and discussing BFT cases at a weekly staff meeting. The research to practice demonstration phase reported here, which extended for 14 months from April 2002 to May 2003, was divided into 6 roughly equal time periods for evaluating progress over time on implementing BFT faithfully. The hospital's electronic medical record was used each day to identify patients admitted to the detox who were living with a family member; a total of 191 patients living with a family member were admitted during the 14-month study period reported herein. Extent of success at conducting BFT (i.e., meeting the benchmarks below) with each patient identified was recorded in a log book and discussed at a weekly staff meeting. Entries in the electronic medical record also were reviewed for each identified patient to see which of the benchmarks the BFT staff person had achieved with the patient.

We monitored key process benchmarks derived from the research projects to ensure fidelity of the ongoing BFT implementation. Benchmarks of key BFT process indicators were the percentage of patients living with an adult family member who:

1. were asked by the BFT staff person for permission to contact their family,
2. agreed to their family being contacted, and
3. actually had their family contacted about aftercare planning.

Benchmark performance levels were based on levels obtained in the earlier studies. Our goal was to establish benchmarks that were realistic and achievable in routine clinical practice. For each indicator, the benchmark set for ongoing practice of BFT was lower than achieved during the research to reflect differences between research study conditions and routine clinical practice. The research phase had certain favorable conditions that did not exist for ongoing BFT implementation. For example, during the research phase there were two part-time BFT staff who provided coverage six days a week, and although they had other non-BFT duties, BFT was their primary function. However, during the routine clinical practice phase there was one full-time staff person 5 day per week (no weekends) devoting about 20% effort to BFT while performing a variety of other clinical duties which competed for the staff person's time and attention. The benchmarks we chose, which are described below, were based on these general considerations.

3. RESULTS

3.1. Percentage of Patients Asked About Family Contact

Results presented in Figures 1-3 show performance relative to each of the 3 benchmarks over the 6 time periods examined. Figure 1 shows the percentage of patients living with an adult family member who were asked by the BFT staff person for permission to contact their family. The benchmark (marked "B" on the Figure) set for ongoing practice of BFT was 85%, somewhat lower than the 96% level achieved during the research (marked "R" on the Figure). As shown in Figure 1, performance exceeded the benchmark in time periods 1 and 2. Then performance decreased substantially in time period 3 after detox nursing staff requested patients not be contacted until their second day on the unit. Since patients averaged just under 3 days on the unit, this change made it more difficult for the staff person who had other duties besides BFT to fit in the BFT patient contacts. This change occurred after the BFT staff member approached a patient about family contact before nursing staff on the detox unit thought the patient was clinically ready for this. Because we were monitoring BFT implementation, we noted the big decline in percentage of patients asked about family contact. Discussions with detox nursing staff lifted the second day restriction in exchange for the BFT staff person checking consistently with nursing staff before talking with a patient to be sure nursing staff had no objections. After this change, performance improved in time periods 4 and 5 and met the benchmark in time period 6.

3.2. Percentage of Patients Agreeing to Family Contact

Figure 2 shows the percentage of patients living with an adult family member who agreed to their family being contacted. The benchmark set for ongoing practice of BFT was 60%, lower than the 86% level achieved during the research. As shown in Figure 2, performance was only half the desired level in time period 1, reflecting that it took some initial training and skill development for the BFT staff person to become proficient at gaining patients' consent for family contact. By time period 2, the BFT staff person had learned how to gain patients' consent for family contact and the benchmark was nearly met. However, the restricted access to patients during time period 3 produced the same decrement as with the other interrelated indicators. When the restriction was lifted, performance improved in time period 4 and exceeded the benchmark thereafter.

3.3. Percentage of Patients Having BFT Family Contact

Figure 3 shows the percentage of patients living with an adult family member who actually had their family contacted about aftercare planning. The benchmark set for ongoing practice of BFT was 50%, lower than the 82% level achieved during the research. As shown in Figure 3, performance was about half the desired level in time period 1 and did not meet the benchmark in either time period 1 or 2. Time period 3 when patient access was restricted showed a further decline. When the restriction was lifted, performance improved but remained lower than desired in period 4. Performance on this indicator was lower than on the other benchmarks because it required more steps and some aspects were out of the BFT staff person's control (e.g., whether family member returned phone call at all or in time for family conference before discharge). Eventually it became clear that moving quickly, as early as possible in the first day of detox, to get the patient's consent and call the family was key to successfully involving the family member in an in-person or phone conference (typically on the patient's second day in detox). When the BFT staff person's work schedule and priorities were adjusted so it was possible to meet this timetable for most patients, this benchmark for including the family in aftercare planning was exceeded in periods 5 and 6.

4. DISCUSSION

Based on two earlier studies showing that BFT increased aftercare treatment post-detox, we trained a newly hired staff person to continue providing BFT. We also monitored key process benchmarks derived from the earlier studies to ensure ongoing fidelity in delivering BFT. To establish the benchmarks, we divided BFT into three successive components necessary to deliver the BFT intervention successfully – asking the patient's permission, gaining patient consent, and actually arranging family contact about aftercare planning. Benchmark performance levels were based on levels obtained in the earlier studies. We monitored performance relative to benchmarks over 6 time periods spanning 14 months.

Results showed a learning curve with gradual improvement in the initial time periods, particularly for gaining consent and actually arranging family contact. Performance decreased in middle time periods when nursing staff objected to the way BFT was being implemented. Once these objections were resolved, performance on all three indicators met or exceeded the respective benchmarks in the final time periods.

The present results are important. Staff training and ongoing performance monitoring proved successful in transferring BFT from delivery in a research study to ongoing delivery in routine clinical practice after the research ended. This approach ensured that a high proportion of patients had their families contacted and included in planning the patients' aftercare. This is the first study to show successful transfer of a research-based family intervention to clinical practice. More such research is needed to determine whether other family-focused treatments, which have a strong evidence base in controlled studies with substance abuse patients, can be implemented faithfully and produce positive outcomes in routine clinical practice. The approach of the present study may be useful in further research. By breaking up BFT into smaller implementation steps, we were able to identify when and where there were implementation problems and correct them. This model of systematically monitoring implementation steps over time could be a useful tool to evaluate a variety of other interventions shown to be successful in research settings but not yet proven to be operational in routine clinical settings.

A few important limitations of the present study should be noted. First, we monitored key process benchmarks but we did not record outcome data. Therefore we do not have information on the percentage of patients who actually entered an aftercare program or on the patients' substance use outcomes. It would have been interesting to determine if BFT delivered under routine clinical conditions produced similar rates of aftercare attendance and similar substance use outcomes as BFT delivered in a research project. Second, the study lacked a control group and the approach used to move BFT from a research project to routine clinical practice consisted of both staff training and ongoing monitoring of staff performance. Thus, we do not know whether both training and monitoring are necessary or whether these specific procedures, beyond nonspecific factors associated with introduction of a new practice in the detox unit (Jex, 2002), were responsible for the successful transfer of BFT from research to practice. Although the study design used does not permit us to determine the relative importance of training versus ongoing monitoring, we believe that the ongoing monitoring was critical to identifying problems when BFT wasn't working and finding solutions to improve implementation of BFT. Third, we used a rather limited measure of fidelity that captured whether the patient's family was contacted and included in a discussion of the patient's aftercare plans. However, this measure did not tap into what occurred during the BFT session (e.g., extent and skillfulness of therapist-facilitated discussion about preferred plans, practical arrangements, troubleshooting). The limited measure of fidelity had the advantage of keeping the monitoring process simple and easy to implement, but it also had the limitation of not assessing delivery of BFT in greater depth. Fourth, only one staff member was trained, so it

cannot be determined if the findings might be attributable to characteristics of that particular staff member. Finally, the approach we used here might not be applicable to more complex interventions for which key benchmarks may be more difficult to identify or monitor.

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Figure 1.

Percent of patients asked about family contact (R = during research project; B = benchmark used to monitor implementation after research project ended; Nos. 1-6 = 6 roughly equal time periods in the 14 months of this research to practice demonstration)

Figure 2.

Percent of patients agreeing to family contact (R = during research project; B = benchmark used to monitor implementation after research project ended; Nos. 1-6 = 6 roughly equal time periods in the 14 months of this research to practice demonstration)

Figure 3.

Percent of patients having BFT family contact (R = during research project; B = benchmark used to monitor implementation after research project ended; Nos. 1-6 = 6 roughly equal time periods in the 14 months of this research to practice demonstration)