

**Evaluation of a Pilot Project Implementing Dialectical Behavior
Therapy in DASA-Supported
Adolescent Substance Abuse Treatment Programs**

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Table of Contents

	Page
Executive Summary	iii
A. Overview of DBT	1
B. Implementation of DBT in Washington State Chemical Dependency Treatment Programs for Youth	6
Daybreak Spokane (Spokane, WA)	6
Daybreak Vancouver (Vancouver, WA)	8
Northwest Indian Treatment Center - Youth Recovery Services (Shelton, WA)	10
The Healing Lodge of the Seven Nations (Spokane, WA)	11
C. Outcomes at DBT Programs	13
Daybreak Spokane (Spokane, WA)	13
Daybreak Vancouver (Vancouver, WA)	15
Northwest Indian Treatment Center - Youth Recovery Services (Shelton, WA)	16
The Healing Lodge of the Seven Nations (Spokane, WA)	17
D. Recommendations for Future Dissemination	17
E. Long Term Evaluation Plan	21
F. Results of Pilot Testing	24
G. References	29
Appendix A. Annotated Bibliography	33
Appendix B. Measures	
Staff Survey	47
Client Survey	49

Evaluation of a Pilot Project Implementing Dialectical Behavior Therapy in DASA-Supported Adolescent Substance Abuse Treatment Programs

EXECUTIVE SUMMARY

December 27, 2004

This report presents the results of a demonstration/pilot project evaluating the implementation and preliminary outcomes of Dialectical Behavior Therapy (DBT) in four adolescent treatment programs supported by the Division of Alcohol and Substance Abuse (DASA). DBT is a comprehensive cognitive-behavioral treatment that focuses on five processes: (1) motivating the client to change (typically addressed in weekly individual therapy); (2) enhancing behavioral skills (addressed in weekly skills training groups); (3) ensuring the generalization of these skills (using phone consultations with outpatient treatment; or, milieu therapy for inpatient programs); (4) structuring the treatment environment to support client and therapist capabilities; and (5) enhancing therapist capabilities and motivations (required attendance at a weekly DBT consultation team meeting). Each of these elements is seen as a crucial part of a DBT program, part of the best practices of DBT.

DBT was originally developed as an outpatient treatment for those with chronic suicidality, borderline personality disorder, and those with disorders co-occurring with borderline personality disorder. It has also been modified to treat a variety of other populations, including substance abuse. It was thought that DBT might be an appropriate and effective treatment for adolescent substance abusers, particularly those having other co-occurring mental health issues.

DBT was introduced to the staff of four adolescent treatment programs: Daybreak-Spokane, Daybreak-Vancouver, Northwest Indian Treatment Center - Youth Recovery Services in Shelton, and the Healing Lodge of the Seven Nations in Spokane. Goals included addressing the needs of youth with co-occurring disorders and dealing more effectively with treatment-interfering behaviors. Staff received intensive training in DBT principles and techniques and DBT, following best practices guidelines, was integrated into these treatment programs.

Results of Process Evaluation

Results of a process evaluation of the implementation indicated that:

- It is possible to successfully train counselors in DBT principles and techniques

- It is possible to successfully integrate DBT into clinical program structures, although the complexity of the approach, staffing issues, and administrative issues may impact on the process of implementation
- Counselors appear accepting of, enthusiastic about, and satisfied with DBT as a treatment approach
- Counselors and administrative staff felt that the incorporation of DBT positively affected the interaction between clients and staff, led to an improved therapeutic atmosphere, and contributed to better treatment outcomes
- Ongoing training of new staff and development of skills with continuing staff, as well as ongoing clinical supervision, is likely needed to maintain counselors' skills and adequate adherence to best practices of DBT in the programs.
- Despite staff receiving DBT training, staff changes and administrative challenges to having an identified team leader and advocate for the implementation of DBT illustrated how critical this aspect was in adopting DBT as a method to improve treatment outcomes

Result of Outcome Evaluation

Preliminary results examining more objective measure of DBT's impact on client behavior suggest that after the implementation of DBT:

- Treatment completion rates increased
- Discharges for disciplinary reasons decreased
- Indicators of client disruptive behavior suggested decreased frequency or rates of occurrence
- Staff responses to disruptive incidents appeared to increase in their rated use of DBT principles and in the rated "positiveness" of the interaction and outcomes

Recommendations

- DASA could proceed with further dissemination of DBT into adolescent treatment centers, but should do so in a planful manner. For DASA to encourage widespread adoption at this time provides a "stamp of approval" beyond what the data warrants
- Recommendations for implementation include a number of program-specific variables to consider:
 - a group size of six to eight participants works well
 - Inpatient programs may be better able to adopt DBT since there is already a "team" concept
 - Average length of stay should be 60 days or more to maximize the probability of impact
 - It would be most effective to train a team of individuals, not just a single counselor
- There are also population variables to consider in implementation
 - The ideal population is one with borderline traits or repeated acts of self-harm

- The population must be developmentally and cognitively able to handle the materials as they are complex.
 - Adolescent-specific materials should be used.
- Program attitudes are important for implementation of DBT
 - Administrative support for training, for establishment and maintenance of a therapist consultation group, and for establishing ways to bill for services is all important.
 - Recognition and provision of the necessary time, effort, and money.
 - Stability of key staff
 - A DBT advocate on site
 - Follow guidelines from the technology transfer literature
- There are other implementation considerations
 - Implement DBT in programs where successful implementation is likely
 - Proceed with implementation in a way that allows for the collection of objective, persuasive data.
 - Continue to develop methods and promote efforts at measuring success of treatment agencies across the state
- Create a long term evaluation plan with a focus in four areas—adherence, fidelity, program/staff evaluations, and both short-term and long-term client outcomes.

Evaluation of a Pilot Project Implementing Dialectical Behavior Therapy in DASA-Supported Adolescent Substance Abuse Treatment Programs

A. Overview of DBT

What is DBT?

Dialectical Behavior Therapy (DBT) is a comprehensive cognitive-behavioral treatment originally developed as an outpatient treatment for those with chronic suicidality (Dimeff & Linehan, 2001; Linehan, 1993a). It has been used extensively to treat those with borderline personality disorder (BPD) and those with disorders co-occurring with BPD. It has also been modified to treat a variety of other populations, in a number of settings. Some of these adaptations have been evaluated in randomized clinical trials; other variations have been studied using a quasi-experimental or pre-post design; other versions have implemented but not evaluated at all. A brief review of some of these applications is presented in the next section.

As a comprehensive treatment, DBT requires a focus on five processes: (1) motivating the client to change (typically addressed in weekly individual therapy); (2) enhancing behavioral skills (addressed in weekly skills training groups); (3) ensuring the generalization of these skills (using phone consultations with outpatient treatment; or, milieu therapy for inpatient programs); (4) structuring the treatment environment to support client and therapist capabilities; and (5) enhancing therapist capabilities and motivations (required attendance at a weekly DBT consultation team meeting). Each of these elements is seen as a crucial part of a DBT program, part of the best practices of DBT.

DBT utilizes a broad range of cognitive and behavior therapy strategies. Like most other cognitive-behavioral approaches, DBT emphasizes ongoing assessment and data about current behaviors; a clear definition of treatment targets; a collaboration between therapist and client; and mutual commitment to treatment goals. The goal is to replace ineffective, maladaptive or non-skilled behavior with skillful responses. DBT skills training help the individual acquire these skills. Stylistically, DBT reframes dysfunctional behaviors as part of a learned problem-solving repertoire, and the focus of therapy is active problem solving balanced with a validation of the clients' thoughts, feelings, and actions. Treatment emphasizes building a positive, collaborative relationship between client and therapist and the primary role of the therapist is as a consultant to the client.

Unlike other cognitive-behavioral approaches, DBT combines the basic behavior therapy strategies with "mindfulness" practices, and there is an overall view that emphasizes the synthesis of opposites in all elements of the treatment. A primary example of this is validating and accepting the client as they are within the context of simultaneously helping them to change.

The goal is to enhance the dialectical thinking patterns and to replace rigid, dichotomous thinking, using a variety of validation and acceptance-based strategies.

Other ways that DBT differs from more traditional cognitive behavioral therapy include: (1) the emphasis on acceptance and validation of behavior as it is in the moment; (2) the emphasis on treating therapy-interfering behaviors of both client and therapist; (3) the emphasis on the therapeutic relationship as essential to the treatment; and (4) the emphasis on dialectic process.

DBT is probably most known for the skills training component, although this is not a more important element of the program. Rather, it is likely that the skills are most widely distributed and adopted because they are available in a manualized format, and readily adopted. There are four skills training modules, each with multiple skills. The four main modules are: (1) mindfulness; (2) interpersonal effectiveness; (3) emotion regulation; and (4) distress tolerance. All clients receive skills training in highly structured small groups to enhance capability: skill acquisition, skill strengthening, and skill generalization. Ideally, the skills group is run by co-leaders.

DBT includes individual therapy and group skills training, but DBT is also intended to be part of the daily interactions. For an inpatient program, this occurs in the milieu with all the interactions between staff and youth; for an outpatient program, the client systematically proceeds to practice the skills and keep a diary of these practices for review with the therapist and/or skills trainer.

The individual therapy (addressing motivation and skills strengthening) focuses on behavioral analyses, skills coaching, cognitive modification exposure-based procedures, and contingency management to change maladaptive behaviors. There are also team consultations where staff receives feedback to ensure that they remain motivated, and continue to follow the DBT framework. There may be a component other significant people (families, parole officers, caseworkers) are taught how to support and reinforce the new skills.

The DBT program is designed to take clients at all levels of severity of a disorder, or stages of recovery. In stage 1, the focus is on stabilizing the client and achieving behavioral control over the disorder. The therapist and client work to decrease life-threatening behaviors, therapy-interfering behaviors, quality-of-life interfering behaviors, and increasing skills (distress tolerance, emotion regulation, interpersonal effectiveness, and self-management). By far the largest focus in the literature and the research has been on this first stage of treatment. Later stages address achieving ordinary happiness in life and for some, a sense of completeness and transcendence. The majority of the evaluations and study of DBT has focused on the first stage.

As is likely evident from the description above, DBT is based on a philosophy about the world and a theory about many behavioral disorders. This perspective on the world stresses three beliefs. The first of these is the interrelatedness or wholeness of the world, that is, the analysis of just the individual parts of a system is of limited value unless the analysis clearly relates the part to the whole. In therapy, this means considering the larger context of behaviors. The second belief is that reality is not static, but instead is comprised of opposing forces. With respect to therapy, the therapist must pay attention to three different polarities the most important of which is the dialectic between the need to accept the client as s/he is and to accept the need to change.

The third belief is that the fundamental nature of reality is change and process rather than content or structure. Therapy must help the client become comfortable with change.

The theory behind DBT as a treatment for behavioral disorders is that these disorders (e.g., borderline personality disorder, substance abuse disorders) are predominantly due to an inability to regulate one's emotions, reactions, and behaviors, coupled with personal/environmental factors that reinforce dysfunctional behaviors. This theoretical foundation perhaps contributes to the depth of the DBT model when considered in its entirety and certainly serves to ground the interventions. At the same time, the philosophy may be off-putting to some and, because it is more complex than simple skills training, it requires considerable effort for an interventionist to become truly accomplished. It requires a balance of acceptance and change strategies within each interaction for the treatment to progress despite a client's crises, emotional dysregulation, and changing motivation. The therapist must "strike a balance between unwavering centeredness (i.e. believing in oneself, the client, and the treatment) . . . and a benevolently demanding approach" (Dimeff & Linehan, 2001, p.2).

Evaluations of DBT/ Other Applications

A brief review of some of the literature on DBT is presented here. The purpose is to identify the populations and settings for which there is some empirical support for DBT, to delineate some modifications that have been put in place, and to consider outcomes that have been documented. A more complete list of research is included in Appendix A.

Populations. DBT has been studied most extensively as a treatment for borderline personality disorder (BPD), both by M. Linehan and her colleagues (Linehan, M., Armstrong, H, Suarez, A., et al., 1991; Linehan, M., Heard, H., Armstrong, H., 1993; Linehan, Tutek, Heard, et al., 1994) and others (Koons, CR, Robins, Tweed, JL et al, 2001). This line of research was expanded to evaluate DBT as a treatment for multi-disordered individuals with co-occurring BPD, including some substance-dependent populations (Linehan, M. Schmidt, H., Dimeff, L, et al., 1999; Linehan, M., Dimett, L, Comtois, K et al., 2002; Dimeff, Rizvi, Brown, et al., 2000). Other populations evaluated in clinical trials, or with a quasi-experimental design have included DBT as a treatment for those with bulimia nervosa (Safer, Telch, Agras, 2001; Telch et al, 2001) and other eating disorders (Palmer, et al., 2003); depressed older adults (Lynch et al., 2002); and those with issues of domestic violence (Fruzzetti & Levensky, 2000).

There are no reports of clinical trials in substance-abusing individuals without a co-occurring personality disorder.

It has been used with adolescents exhibiting borderline traits (Katz, Cox, et al., 2004; Rathus & Miller, 2002) and adolescent juvenile offenders (Trupin, et al., 2002). Miller et al (2002) report modifying the standard DBT materials: shortening treatment length to improve likelihood of completion; teaching skills to family members to enhance generalization; and reducing the number of skills taught and simplifying the language. In Washington, it has also been adapted for use at Echo Glen JRA.

Settings. Although DBT was initially designed as an outpatient treatment, it has been implemented in a variety of other settings. There are reports of implementation in inpatient and partial hospitalization settings (Bohus, et al., 2004; Wolpov, Porter, Heramanos, 2000), in forensic settings (Eccleston & Sorbello, 2002; McCann & Ball, in review), at a high-security hospital (Jones, Duggan et al, 2001).

Outcomes. The types of positive outcomes reported in the literature of course vary with the population. In BPD populations, DBT led to effects on treatment (better compliance, longer retention, higher completion rates), on borderline symptoms (reduced parasuicidal behaviors, better social adjustment) and service utilization (fewer inpatient days. DBT reduced binge eating in those with binge-eating disorders, with effects lasting at least 6 months after treatment.

In those with substance use disorders and BPD, some research indicates that DBT led to lower rates of drug use, increased retention, and improved social functioning. Others found that DBT was not more effective than treatment-as-usual in reducing substance use problems although it reduced borderline symptoms (van den Bosch et al., 2002).

Juvenile offenders treated with DBT demonstrated fewer behavior problems while in treatment and there was a reduction in the use of punitive responses by staff (Trupin, Stewart, Beach, Boesky, 2002). Suicidal adolescents showed fewer psychiatric hospitalizations, higher rates of treatment completion, reduced psychiatric symptoms, and reduced BPD symptoms, fewer inpatient psychiatric hospitalizations.

An evaluation by the Washington State Institute for Public Policy of the preliminary findings for the Juvenile Rehabilitation Administration's DBT program at Echo Glen, is relevant. The group conducted a follow-up with youth at Echo Glen for treatment at least 14 days, contacting clients who were admitted prior to DBT implementation and some who were admitted after DBT implementation. Felony recidivism rates over the next year were lower for those who received DBT (10% of DBT youth and 24% of non DBT youth, Barnoski, 2002).

It should be noted that DBT is not necessarily supported as an evidence-based practice for community mental health centers. Two quotes are indicative of this, "Early empirical results are promising, although they are not sufficient to establish DBT as an evidence-based practice in community settings" (Swenson, Torrey, Koerner, 2002). And, Marsha Linehan has written, "although there have been a number of controlled trials examining the efficacy of DBT, the extent of the treatment's efficacy, the mechanisms of efficacy, and the degree to which the treatment should be adopted in community mental health centers are not clear" (Linehan, 2000)

Best Practices of DBT

DBT typically includes four stages or foci. In stage 1 the focus is on establishing behavioral control and mastery of skills. In stage 2 the focus is on resolving posttraumatic stress disorder. Stage 3 addresses issues of self-respect and individual goals, and stage 4 focuses on increasing the capacity for sustained joy. Each stage has its own prioritized list of targets. For instance, in stage 1 the therapist tries to reduce life-threatening behaviors, then behaviors that interfere with

therapy, and then behaviors that interfere with quality of life. The final step in stage 1 is to help the client increase the use of his or her skills.

DBT is highly structured, particularly during the initial stage of treatment when the individual is lacking in behavioral control and consequently is engaging in dysfunctional and life-threatening behaviors. DBT's comprehensive treatment is delivered through five basic modes of treatment, each offered concurrently and each serving a unique function.

The five elements are:

- (1) Individual psychotherapy, minimum 1 hour a week, with a focus on improving the client's motivation to work toward obtaining a life worth living, on motivation to change behavior, and the rehearsal of cognitive and behavioral skills important in the regulation of emotions. Individual DBT requires a validating therapeutic relationship and uses cognitive-behavioral techniques to facilitate behavior change and skills acquisition.
- (2) Structured skills training, usually in a group, minimum 2 hours a week, emphasizing the acquisition and strengthening of skills with the goal of enhancing the client's behavioral capabilities. The skills are taught in modules and include mindfulness, interpersonal skills, regulation of emotions, and distress tolerance.
- (3) Phone consultation or coaching as-needed (for outpatients) or milieu therapy (for inpatient treatment settings) to ensure generalization of skills and effective implementation of problem-solving strategies in daily living. In Linehan's model therapists are generally available for coaching calls according to the patient's need, because patients can better generalize skills if they are helped to apply them when they are most needed.
- (4) Case consultation group for therapists (minimum 1 hour a week), to enhance therapists' capabilities and motivation to effectively treat BPD clients. The consultation group provides a venue in which clinicians can receive consultations about their patients, coordinate care, and get feedback from other clinicians.
- (5) Supportive administrative structures, including elements to structure the treatment environment to support clients' and therapists' capabilities; case managers help clients structure their environments

The components of DBT have not been evaluated separate from one another. The program is designed as a comprehensive treatment, comprised of 5 elements. To implement DBT at an agency, one would have to include each of the five elements. There have been modifications made to the elements, with Marsha Linehan's collaboration and support, to address differences in the population and setting. However, there is really not a means to select just a few components.

B. Implementation of DBT in Washington State Chemical Dependency Treatment Programs for Youth

A goal of the Division of Alcohol and Substance Abuse (DASA) is to provide funding for high quality substance abuse treatment that meets the specific needs of the clientele being served. As part of this goal, DASA has emphasized improving treatment entry, engagement, retention and completion of its clients and improving the clinical skills of treatment and support staffing youth residential and outpatient treatment programs. As part of this effort, DASA designated youth treatment funding for a DBT demonstration/pilot project with four programs in the state. These were the Daybreak-Spokane, Daybreak-Vancouver, Northwest Indian Treatment Center - Youth Recovery Services in Shelton, and the Healing Lodge of the Seven Nations in Spokane. Goals also included addressing the needs of youth with co-occurring disorders and dealing more effectively with treatment-interfering behaviors.

The following section provides an overview of the treatment programs involved in the evaluation of DBT, a summary of the staff training process, issues involved in the integration of DBT into their programs and its implementation, how well the structure of the program as implemented followed DBT guidelines, and their plans in regard to continuing use of DBT beyond the pilot study.

Daybreak Spokane (Spokane, WA)

Program: This is contracted Level II secure inpatient program, with locations in Spokane and Vancouver. Level II treatment serves youth who have symptoms of mental health diagnosis requiring concurrent management with addiction treatment, present a major risk of danger to self or others, or are at high risk to not complete treatment. (Peterson, Srebnik, Banta-Green, & Baxter, 1997). Daybreak sees approximately 400 admissions per year across the two sites. As can be seen in Table 1 below, the Spokane program accounts for approximately 67% of the total annual admissions. Daybreak has been in operation in Spokane since 1980, and the inpatient program was started in 1984. They have 34 beds for intensive IP; 25 contract with DASA. Patients come from the Spokane area (about 30%), other parts of Washington (30%), and Idaho (30%). The daily average is to have about 37-40 beds full. There are 8 primary counselors and 38 milieu counselors at the agency.

Table 1: Annual Admissions to Daybreak Inpatient Programs, 2001-2003

Treatment Admissions by Year by Daybreak Facility (Duplicated)			
	2001	2002	2003
Spokane	280	269	279
Vancouver	115	123	158
Treatment Admissions by Year by Daybreak Facility (Unduplicated)			
	2001	2002	2003
Spokane	272	266	276
Vancouver	113	122	150

The programs at Spokane and Vancouver are evaluated separately. There is also an outpatient program in Spokane, which was not included in this evaluation. The decision was made to omit the outpatient program based on program staff's belief that DBT was less fully implemented in the outpatient setting and that finding systematic data for evaluation would be difficult.

Summary: DBT was initially implemented in November 2001. There has been steady progress since that time, with ongoing training of new staff and development of skills with continuing staff. The program administration is supportive of the program and the staff has been very enthusiastic. Daybreak Spokane continues to work at improving the implementation of DBT, which they now report at 70% accomplished. The program will likely retain DBT as a key element of the intervention provided, in combination with Motivational Enhancement and drug education components as well.

Training:

The "usual" way to learn DBT is to attend trainings conducted by the Behavioral Tech, LLC. This group, comprised of Marsha Linehan and other DBT experts, offers several levels of training. There are one- and two-day trainings including a DBT Overview, DBT Skills Training, DBT Individual Therapy Training, and DBT for Substance Abuse; these trainings are offered several times a year in the Pacific Northwest. The group also has trainer/consultants available to conduct a 1- or 2-day training onsite at an agency. Finally, the group offers an "intensive" training experience in which a team from the agency attends two 5-day trainings (typically out of the area), separated by several months. This approach is designed to directly assist the team with the barriers to implementation.

DBT training was initiated at Daybreak Spokane in the summer and fall of 2001. None of the program staff have attended a 5-day intensive DBT training. However, numerous members have attended different two-day trainings. Some staff has attended multiple two-day trainings. In addition, they had a 2 day training/ consultation by the staff at Behavioral Tech, LLC at the Spokane site. Staff have visited Echo Glen for additional experience.

Implementation:

DBT was implemented starting around November 2001. Several staff members had become interested in the program after hearing about dramatic improvements at certain programs and attending some trainings.

The implementation has proceeded smoothly, overall. Agency directors and some staff report seeing a big difference in how staff interacts with clients. There is better integration across treatment modalities and between staff that is reflected in the chart notes, with clearer observing, defining, and intervening rather than "venting". The interventions seem to be more focused, and more developmentally appropriate than what was previously seen. They report a positive outcome even among those staff members who had reservations about the program. In particular, they talk about a counselor who had a long history of using a strongly 12-step approach. He was very negative about DBT and reluctant to implement the program. He has since completely changed his opinion: "It works for the kids, so it works for me".

Their impression is that DBT has also improved outcomes for the clients: better engagement in therapy, a reduction in therapy-interfering behaviors, and increased socialization. They believe it may be evident in better outcomes reflected in length of stay, reason for discharge, and completion rates.

The agency also reports that staff are happier, and feel better about their jobs; an in-house survey conducted in June/ July 2003 supported this belief. When asked, the staff generally report liking the DBT program, stating that it makes them feel more empowered and competent in their job. There is a fairly low rate of staff turnover. This has allowed for greater stability for staff and clients, more consistency, and fewer disruptions. It has facilitated DBT implementation.

Adherence to Best Practice Standards:

Using the DBT Program Adherence Interview Form, Evaluation of the Implementation of DBT Core Components (Swenson, CR, Hawkins, K, and Singha, R, 1997), each program was evaluated for how well the structure of the program follows DBT guidelines. This interview asks about the frequency of certain activities, the percentage of clients who receive different interventions, how training and support are incorporated into the program, etc. The interview is clearly subjective, and in this instance, was conducted with the primary DBT advocate at each program. The scores reflect the percentage, taking into account only the questions applicable to the program.

Individual Therapy (Motivational Analysis/ Enhancement): 81%

Group Skills Training (Capability Enhancement): 96%

Phone Coaching and In Vivo Rehearsal (Generalization of Skills): 80%

Peer Support & Consultation group (Capability and Motivation to Treat Effectively Enhancement for Therapists): 68.8%

DBT Leader, Administrative Support and Ongoing Consultation (Structuring the Environment): 42.0%

After completing the interview, two additional questions were asked. These questions were added to better capture how extensively DBT has been implemented, according to the key informant's perception overall.

What percentage of interactions are DBT? 60%

How well are the staff overall doing DBT? 70% counselors
55% milieu staff

Plans:

Daybreak Spokane intends to continue with the DBT program. They are interested in the outcomes from this evaluation, and hope to use some of the information to enhance the work they are doing.

Daybreak Vancouver (Vancouver, WA)

Program: Daybreak Vancouver is a contracted Level II secure inpatient program that has operated since 1999. The program started with 8 beds, and has now increased in capacity to 16

beds. Daybreak Vancouver has had 120 admissions per year. Patients come mostly from Washington: about 30% from Clark county; 45% from the Puget Sound region, and the rest scattered from other Washington counties. The daily average census is 15. There are 4 primary counselors and 20 milieu counselors at the agency.

Summary: DBT was initially implemented in November 2001. There has been steady progress since that time, with ongoing training of new staff and development of skills with continuing staff. The program administration is supportive of the program and the staff is positive about the program. Daybreak Spokane continues to work at improving the implementation of DBT. The implementation has been hindered to some extent due to specific staffing issues. Recent changes (new full-time onsite senior staff and some staff turnover) seem to be having a positive impact on the program's services in general, and specifically the implementation of DBT. The program will continue DBT as a key element of the intervention provided, in combination with Motivational Enhancement and drug education components as well.

Training: DBT training was initiated at Daybreak Spokane in the summer and fall of 2001. None of the program staff have attended a 5-day intensive DBT training. However, numerous members have attended different two-day trainings. Some staff has attended multiple two-day trainings. In addition, they had a 2 day training/ consultation by the staff at Behavioral Tech, LLC, at the Vancouver site.

Implementation:

DBT was implemented starting around November 2001, in conjunction with the implementation at the Spokane facility. Several staff members had become interested in the program after hearing about dramatic improvements at certain programs and attending some training.

The implementation has proceeded smoothly, overall. As staffing has changed, the specific level of skilled implementation has been somewhat variable. The agency is convinced that DBT has improved outcomes for the clients, and that staff feel more enthusiastic and competent in their job.

Recently, a new full-time on-site Treatment Director (Michael Ott) was hired, rather than having the position covered with someone onsite part-time. The site also has a change in the Clinical Supervisor position. Both of these changes are viewed as positive developments. This site has more staff turnover than the Spokane site. This makes the implementation of DBT more of a challenge, requiring more frequent training and closer supervision. However, the agency and administrative staff are committed to having DBT be implemented and they continue to support ongoing education and consultation.

Adherence to Best Practice Standards:

Using the DBT Program Adherence Interview Form as described above, Daybreak Spokane reports the following levels of adherence:

Individual Therapy (Motivational Analysis/ Enhancement): 73%
Group Skills Training (Capability Enhancement): 90%
Phone Coaching and In Vivo Rehearsal (Generalization of Skills): 72%

Peer Support & Consultation group (Capability and Motivation to Treat Effectively Enhancement for Therapists): 76%

DBT Leader, Administrative Support and Ongoing Consultation (Structuring the Environment): 52%

After completing the interview, two additional questions were asked. These questions were added to better capture how extensively DBT has been implemented, according to the key informant's perception overall.

What percentage of interactions are DBT?	90% counselors 60% milieu staff
How well are the staff overall doing DBT?	80% counselors 55% milieu staff

Plans: Daybreak Vancouver intends to continue with the DBT program. They are interested in the outcomes from this evaluation, and hope to use some of the information to enhance the work they are doing.

Northwest Indian Treatment Center – Youth Recovery Services (Shelton, WA)

Program: The Northwest Indian Treatment Center (NWITC), which opened in 1994, provides residential alcohol and drug treatment to a primarily Native American population from Washington, Oregon and Idaho. The Center began introducing DBT to all tribal departments that interface with youth in January 2002 (mental health, domestic violence prevention, Indian Child Welfare, education, law enforcement, and human resources). Three chemical dependency staff offer DBT in different modes (only one at Youth Recovery Services).

Summary: The agency has done a good job of implementing DBT. Due to the newness of the youth treatment program and the small census, it has been less well adopted there. This precludes any pre-post evaluation of DBT outcomes. In addition, the number of clients seen to date is so small that any comparison using the data would not be robust.

Training:

Of the agencies reviewed for this report, the Northwest Indian Treatment Center received the most systematic, intensive training. A group of 4 attended an intensive 5-day training in June 2002, with the second part of the intensive training in Feb 2003. Attendees at the intensive included the Administrative/Clinical Director, the Director of the Adult program and the Counselor for the Adolescent program. Three of the four returned for the follow-up 5-day intensive training in February 2003 (one could not attend due to a crisis at the agency). The DBT program was implemented across divisions within the agency (adult inpatient, adult outpatient, as well as the adolescent program). A cross-agency training (2-day onsite) was held in January 2002. Two other 2-day trainings have been done at the agency.

Implementation: This agency has done the most systematic implementation of DBT. Along with consultation from Behavioral Tech, LLC, they developed a timeline for implementing DBT across several divisions. They continue to meet internally to develop this further; they continue to get consultation as needed to assist this process.

The implementation issues have been predominantly those associated with starting a new program, not with adopting DBT. This represents a particular challenge for this agency in part because it has taken time for the tribes to be fully accepting of the program and to be willing to send their youth for treatment.

This group has also done a lot of work in utilizing DBT in their interactions with other agencies and significant others. This is recommended by Marsha Linehan, but has not been done at the other agencies evaluated here.

Adherence to Best Practice Standards:

Using the same method described above, the following percentages reflect DBT adherence at the Northwest Indian Treatment Center.

Individual Therapy (Motivational Analysis/ Enhancement): 72.5%

Group Skills Training (Capability Enhancement): 68%

Phone Coaching and In Vivo Rehearsal (Generalization of Skills): 65.7%

Peer Support & Consultation group (Capability and Motivation to Treat Effectively Enhancement for Therapists): 74.0%

DBT Leader, Administrative Support and Ongoing Consultation (Structuring the Environment): 88.0%

What percentages of interactions are DBT? 80%

How well is the staff overall doing DBT? 70%

Plans: The agency plans to have DBT be more fully implemented as the program grows. They anticipate no problems, and they remain enthusiastic about DBT.

The Healing Lodge of the Seven Nations (Spokane, WA)

Program: The Healing Lodge is a contracted Level I program for adolescents. Technically, this designation typically reflects a less acute, difficult client population than a program having a Level II designation. However, some of the data suggest that this population has some unique problems. Generally, the acuity of Native American youth has been higher than average due to generational histories of alcoholism, family displacement, and attendant psychosocial issues.

Summary: The Healing Lodge has undergone considerable agency-wide changes since first contracting with DASA for assistance in integrating DBT into the program. This has interfered with the agency's ability to fully implement DBT. However, at this date, the agency still wants to incorporate parts of DBT and is working on doing that.

Training: According to agency records, sixteen staff members attended a two-day training in June 2001; 8 staff members went to the intensive 5-day training in October 2001; 9 more staff went to a two-day training in Spring 2002. In addition, several members visited Daybreak Spokane and Echo Glen for insight into how DBT was being implemented in adolescent treatment agencies in the state. There have been no on-site trainings. The homework assigned at

the first meeting was not completed by the agency. No staff returned for the second 5-day intensive.

Implementation: Members of the staff initially heard about DBT in 1999, and a supervisor recommended that some of the staff visit Echo Glen. The agency elected to send some staff to the intensive 5-day training in Minnesota, thought it would help the whole program. The new main advocates tried to bring DBT into the agency, but there was considerable resistance. The implementation was politically and personally challenging. There was never team support for full implementation. They tried to conduct some on-site trainings, but “the staff did not get it”. By the Summer of 2002, several aspects of DBT were incorporated into the program. The agency had introduced mindfulness exercises in groups throughout the program and had started some skills training. The patient handbook was rewritten to make it represent a more validating environment, more congruent with the DBT philosophy. At this point, there was recognition that some of the treatment staff “had been left behind” and the implementation was slowed down. “Maybe it wasn’t planned well” was the comment from a current employee; another commented, “Maybe because it was free it wasn’t seen as worth much”. (*Note – individual trainees did not pay out of pocket for training, but it was not free*).

Over the summer and early fall, there was considerable staff turnover. In addition, the two main DBT-advocates left the program in Fall 2002. Most of those who had attended any of the trainings are no longer working at the agency. There was little contact with Behavioral Tech, LLC, for any further consultation. By December 2002, there were more difficulties at the agency, not specific to the DBT implementation. A new administrative director, Pat Calf Looking was hired in November 2002; a new program coordinator (Louella Heavy Runner) was identified, in June 2002.

They reported that the adolescents were suffering as a result of the agency and staffing changes. There seemed to be an increase in verbal abusiveness from the kids on the units, likely because the staff was not consistent and the skills were not being taught. The agency was going to close briefly at the end of 2002, conduct intensive staff training (not DBT-specific) in January 2003, and start over. The program planned several changes including hiring more staff, hiring a licensed MH worker; improving the compensation plan; empowering the staff; and providing a clear line of authority. This overall program development must be completed before DBT can be really implemented.

Despite the difficulties at the agency, and the complexity of the DBT model, the Healing Lodge still wants to implement DBT due to expected “great results”. They want to integrate a modified version of DBT within a culturally specific program to address behavioral issues that occur. Specifically, they want to see the material made “more approachable” and less technical. They planned to restart with DBT overview training in January 2003. The agency planned to use Diary Cards in some manner (but had to get the staff trained first). They intend to have skills training groups, separate for girls and boys, and hope this will decrease the number of incidents on the units. They intend to start an Emotion Regulation group (1.5 hours/week), an Interpersonal Effectiveness group (1.5 hours/week) and a Distress Tolerance group (1 hour/week), as well as Mindfulness (.5 hour/ day).

They recognize the difficulty of implementing such a “complicated” treatment and worry that the team could easily fall apart without support, similar to what happened in 2002. They have ideas of what has to happen differently, including taking time to talk up DBT, explaining DBT more to the whole staff, keeping the content less technical; and finally, making the DBT approach applicable to the clinic. Finally, they need to establish a time frame to implement it. This implementation is still ongoing.

Plans: The agency is still interested in the DBT model. They report that staff changes are now resolved and the implementation is proceeding (June 2003). The agency is particularly interested in: the mindfulness training; the validation of clients; and the skills development components.

C. Outcomes at DBT Programs

Daybreak Spokane

Youth Assessments: Several types of data were evaluated for this assessment. Some of these data are available through the Treatment and Assessment Report Generation Tool (TARGET) data system, including average length of stay, percent retained for 60 days, as well as completion rates and discharge codes.

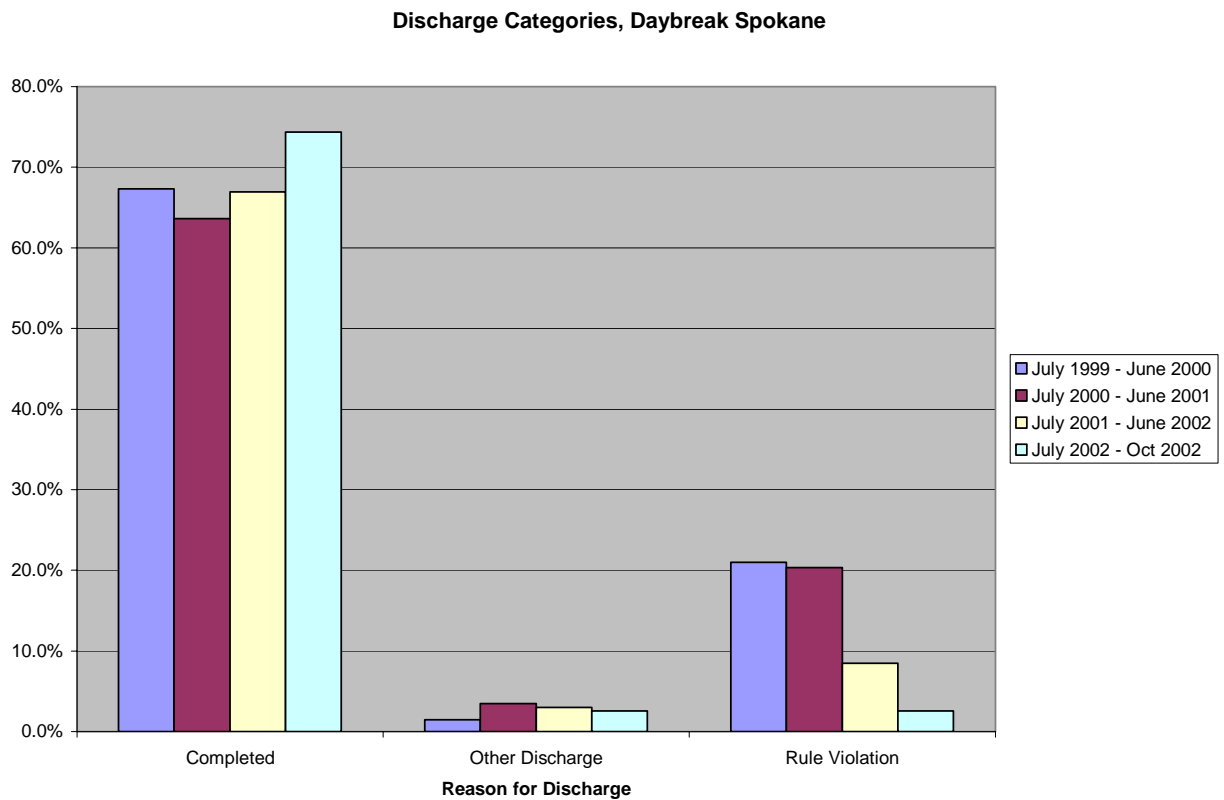


Figure 1. Discharge Categories – Daybreak Spokane

Completion/ discharge data are presented in Figure 1. Four time periods were used (not equivalent in length, so percentages are used for all categories). During the first two time periods, prior to any DBT training or implementation, the average rate of program completion was 65.3%. The third time period overlaps the introduction of DBT and the completion rate for that period was 66.9%. The final time period, after DBT was implemented throughout the program, the completion rate was 74.4%.

Another important finding is that the rate of discharges due to “rule violations” decreased once DBT was implemented. Prior to DBT implementation (averaging the first two time periods), discharges due to rule violations was 20.6%. During the period overlapping DBT implementation, the rate dropped to 8.5%. During the final time period, after full implementation, the rule violation discharges dropped further to a rate of 2.6%.

Negative behaviors/ incidents were expected to decrease with DBT implementation. Certainly one of the results found in other reports is that life- and therapy-threatening behaviors are significantly reduced with effective DBT implementation. This evaluation considered this measure in several ways. All staff members are to complete an infraction or incident report with anything that occurs indicating an infraction that warrants an intervention or that is legally defined as an incident. These reports are most often completed by milieu staff, but also sometimes by the counselor. There is no way to be certain that every incident is recorded, but it is supposed to be. Also, there is often limited information provided in the document, so that it is not always possible to determine what intervention was taken. Finally, this is a very subjective document, and so any conclusion based on the documents must be considered in that light.

The first evaluation was a simple count of the number of incidents over a period of time. For the month of May 2001, there were 168 “incidents” (minor/ major/ limit infractions and critical incidents) in the clinic; for the month of May 2003, after DBT implementation there were 269 in the clinic. The census was approximately the same over that period of time. By this measure, there was a significant increase in incidents, contrary to what would be predicted.

A second evaluation was to examine in detail 10 case files from January 2001 and 10 case files from January 2003. By a simple count, there were 69 incidents in 2001 and only 49 incidents in 2003, a reduction in the number of incidents. In addition, a qualitative evaluation of the incidents was completed. Each incident was rated on two dimensions, using a 1-5 Likert scale: (1) how fully did the incident, as written, and the ensuing intervention follow DBT guidelines; and, (2) how “positive” was the overall intervention (i.e., non-punitive, de-escalating, helpful to the client). In both measures, a higher score would indicate a better response. By this measure, the incidents recorded in the individual charts produced an average of score of 2.1 in 2001 and an average score of 3.0 in 2003. The incidents were rated as more positive in 2003 (average 2.6) than in 2001 (average 2.3).

Finally, a sampling of the full set of incidents for the months of May 2001 and May 2003 was also rated using the same 2 dimensions. Here the average rating of DBT-ness increased from 2.4 in 2001 to 3.1 in 2003; the average rating of positive-ness increased from 2.6 to 2.9.

Staff Assessments:

Administrative staff has the impression that staff retention has improved since the introduction of DBT. However, we were unable to get objective data on that measure for this evaluation.

Finally, a new satisfaction/effectiveness measure was piloted at the clinic, and results are included in the final section of this report.

Daybreak Vancouver

Youth Assessments: Several types of data were evaluated for this assessment. Some of these data are available through the Target data system, including average length of stay, percent retained for 60 days, as well as completion rates and discharge codes.

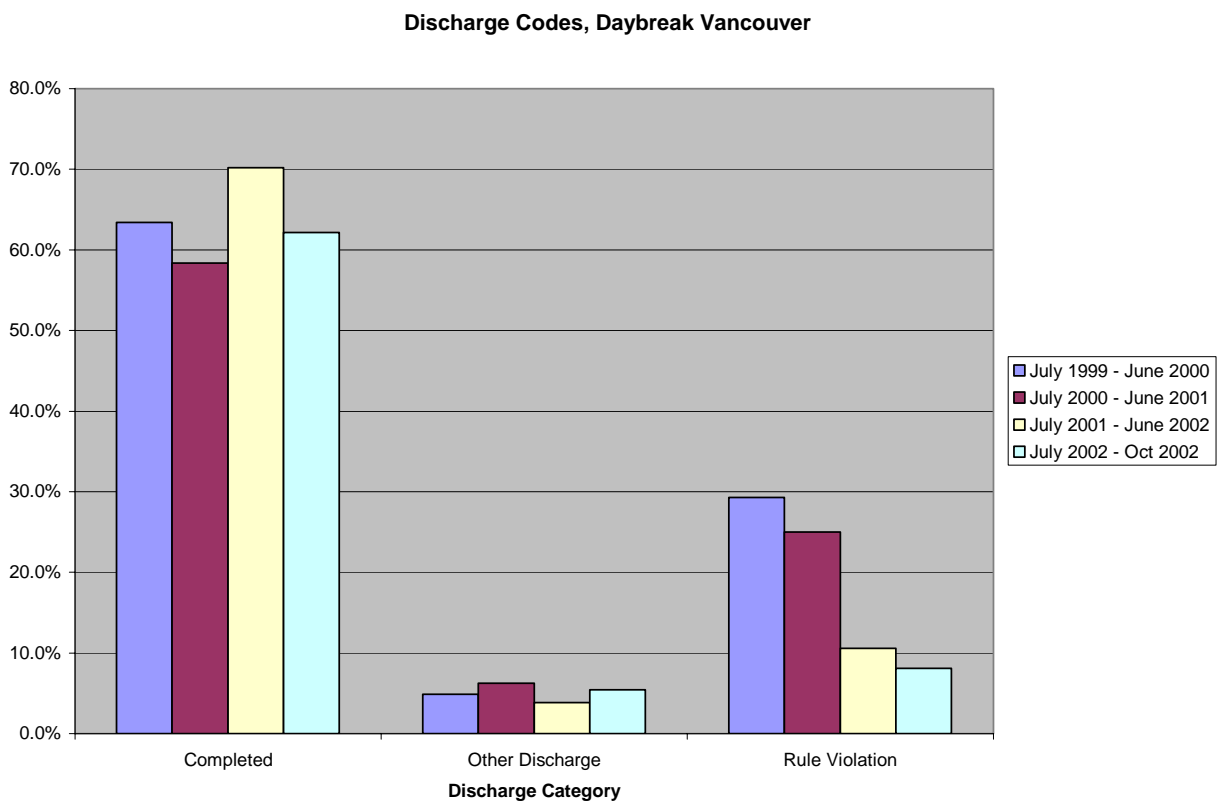


Figure 1. Discharge Categories – Daybreak Vancouver

Completion/ discharge data are presented in Figure 2. Four time periods were used (not equivalent in length, so percentages are used for all categories). During the first two time periods, prior to any DBT training or implementation, the average rate of program completion was 59.9%. The third time period overlaps the introduction of DBT, and the completion rate was 70.2%. The final time period, after DBT was implemented throughout the program, the completion rate was 62.2%.

Another important finding is that the rate of discharges due to “rule violations” decreased once DBT was implemented. Prior to DBT implementation (averaging the first two time periods), discharges due to rule violations was 26.3%. During the period overlapping DBT implementation, the rate dropped to 10.6%. During the final time period, after full implementation, the rule violation discharges dropped further to a rate of 8.1%.

Negative behaviors/ incidents were evaluated using the same method for the clinic in Vancouver. Unfortunately, there is no log of incidents kept at the Vancouver clinic, so the overall comparison of the number of incidents is not possible.

Case files were examined. By a simple count, there were 55 incidents out of 115 admissions (a rate of .473 incidents per youth admitted) in 2001 and only 43 incidents out of 158 admissions (a rate of .272 incidents per youth admitted) in 2003, in the cases selected. This is a reduction in the number of incidents after DBT implementation. The qualitative assessment of the nature of the incidents showed an increase in DBT-ness from an average of 2.7 to an average of 3.5. Interestingly, the incidents were rated as less positive in 2003 (average 3.0) than in 2001 (average 3.2). These case files were notable for another reason. The incident reports were not as reliably completed as had been the case with the files from the clinic in Spokane (e.g., there were examples in the notes that indicated an incident had occurred but there was no accompanying incident report). It was not possible to determine whether that was occurring differentially in 2001 or 2003. In addition, in the 2003 case files, there was evidence of a staff member whose responses were notably punitive in nature. Administrative staff indicated that the individual decided to leave shortly after these incidents were documented. Of course, in a small sample as with this evaluation, these factors could be having considerable influence on the final numbers.

Northwest Indian Treatment Center – Youth Recovery Services (Shelton, WA)

Only limited outcome data is possible to obtain from Northwest Indian Treatment Center at this time. In any case, the only possible analysis to evaluate effects of DBT would be a comparison of agency outcomes to some comparable agency (using case-mix adjustment approach).

Youth Assessment

A total of 14 youths have been treated since program inception. Nine of these cases are still active.

The average length of stay for those discharged from the program is 167 days.

Of those discharged from the program, 2 completed treatment, 1 died from an overdose, 1 moved out of the area, and 1 withdrew with program advice.

The agency has started using an “outcomes” measure, asking about school attendance, number of detention, days used, etc. At this time, there are mid-treatment assessments done on three clients and so these data are not going to be reported.

There is no log of “incidents” comparable to that used at an inpatient facility. (Of course, there is a critical incident report log, but that does not contain the types of events that could be used for analysis of DBT implementation and outcome).

Staff Assessment: Staff retention is not an issue at Northwest Indian Treatment Center. This is a new program and there has been only the one staff person in charge of the youth recovery

services. An interview with her indicated that she is very satisfied with her job and enthusiastic about DBT. She acknowledges some difficulty getting the standard DBT program in place, but attributes that to the newness of the program and the small census. She expects that situation to continue to improve with time. She feels that the treatment she is providing at this agency is a better program for the youth than her other CD treatment experience in the state.

The Healing Lodge of the Seven Nations (Spokane, WA)

No outcomes due to DBT implementation are possible at this time. Although some staff received DBT training, staff changes and administrative challenges to having an identified team leader and advocate for the implementation illustrated how critical this aspect was in adopting DBT as a method to improve treatment outcomes. Due to these many staff changes and administrative issues, DBT had not yet been implemented at the program by summer of 2003. At some point in the future, it would be very useful to conduct a comparable evaluation of outcomes at the agency to see what data can be garnered there.

D. Recommendations for Future Dissemination

Does it merit further dissemination?

DBT is a comprehensive cognitive-behaviorally based treatment with some empirical support as a treatment for borderline personality disorder or BPD and co-occurring behavioral disorders, including substance dependence. However, even lead researchers in the field indicate that DBT is not necessarily supported as an evidence-based practice for community mental health centers. Furthermore, there is no direct empirical basis for DBT as a treatment for substance disorders, in the absence of borderline traits or parasuicidal behavior. Obviously, to the extent that the population being served has co-occurring personality disorders, there is more empirical foundation for its adoption, although some research has indicated that standard DBT does no better than at least one version of “usual treatment” to reduce substance use, even though it reduced behavioral problems and parasuicidal behaviors. Finally, there are fewer reports in the literature for using DBT as a treatment for adolescent populations; some of the implementations with adolescents have further modified the program to make it more developmentally appropriate. The current evaluation, while suggesting intriguing positive outcomes, is not sufficient for DASA to encourage widespread adoption. At a minimum, considerably more prospectively gathered data from community clinics and data from a randomized clinical trial would be required.

Given that state of development, there are still some reasons to consider adopting DBT as a treatment for adolescent with substance abuse problems in the state of Washington. Theoretically, DBT still has promise as a treatment for adolescent substance abuse, particularly in settings where acting out, behavioral problems, and parasuicidal acts occur. If the population being served meets this criterion, there is a good base of support for implementing DBT. The developers of DBT have produced an adaptation of DBT for the treatment of substance use problems; there is not yet published data from randomized clinical trials, but this adaptation is likely to be more relevant than the standard DBT materials. Materials must be developmentally appropriate. These DBT adaptations should be the recommended approach for any further implementation. Finally, there must be recognition that some of the outcomes from clinical trials

show this as a better treatment for behavior problems, and that its effects are most pronounced on improving retention and treatment completion. Each of these may indirectly reduce substance use and its associated problems, but there may not be a direct effect evident.

Additional consideration must be given to other effects that the adoption of DBT might have at a treatment facility. It is remarkable that all four clinics that received DASA support for training and implementation remain very enthusiastic about the program, regardless of how well the program has been implemented. Each of the clinics continues to work on implementing the program more fully and/or with greater expertise. The current outcome evaluation was unable to show direct staff benefits, but the proposed long-term evaluation may provide some data in that regard. The qualitative information gathered from these clinics does provide some clues about these more general positive program outcomes. (1) This is a comprehensive program that requires the involvement of the entire treatment team to be successful. That team-building itself seems to be a positive outcome. (2) Having an integrated program allows all staff “to speak the same language”; everyone works together better in addressing each client’s issues/ concerns. (3) Having a single treatment approach seems to facilitate good administrative procedures and to ease problems with staff turnover (i.e., the program does not change each time a new person is hired). (4) The philosophy and theory behind DBT approach and its explanation for problem behaviors fits well with many treatment providers at community clinics. (5) There is a perceived need for better treatment. (6) A fairly universal comment is that DBT is a more “positive”, validating approach than what had been done before. (7) it is an approach that is validating for the therapists as well as for the clients, when implemented as designed.

Given the many caveats, DASA could proceed with further dissemination, but should do so in a planful manner. For DASA to encourage widespread adoption at this time provides a “stamp of approval” beyond what the data warrants.

How should implementation proceed?

There are some specific recommendations, based on the literature (e.g., Spont, et al., 2003; Swenson, et al., 2002) and the experience of other programs, which can guide implementation.

There are program-specific variables to consider:

- (1) The size of the program matters, in order to be able to offer skills training groups. The literature suggests a group size of 6-8 works well, but there is variability. If the program is too small, it is difficult to support sustaining groups.
- (2) In many ways, an inpatient program may be better able to adopt DBT, since there is already a “team” concept. This is the case even though DBT was originally developed as an outpatient approach.
- (3) The standard duration of treatment is important. There is a considerable amount of material to be covered. If the average length of stay is less than 60 days, it is unlikely that much impact will be seen.
- (4) The most effective way to have a successful implementation is to train a team of individuals (not necessarily for the “intensive” training), not just a single counselor. It

would be extremely difficult for a single practitioner to effect a change in their program. Furthermore, without the consultation team, it would be difficult to sustain DBT over time. Behavioral Tech, LLC, and others would suggest that the intensive training is likely the most certain way to initiate and sustain program change, but the two clinics in this evaluation that have been most successful at implementation never sent staff to the intensive training.

There are population variables that should guide identification of other programs:

- (5) Clearly the data is most convincing when DBT is utilized as a treatment in populations with borderline traits, or repeated acts of self-harm. This would be the ideal population.
- (6) DBT is a complex treatment. The population must be developmentally and cognitively able to handle the materials. There are some adolescent-specific materials available, which should be used, but the age range of the population remains a concern.

There are program attitudes that are important for implementation of DBT:

- (7) Administrative support. This includes support for training; support for the establishment and maintenance of a therapist consultation group (different than supervision groups); and support to figure out how to bill for services as provided in the model.
- (8) Recognition and provision of the necessary time, effort, money. This is a fairly complex treatment program. Although there are manuals and materials, it is not a program that can be instantly implemented. A universal comment is that it takes a lot of effort to get the model initially implemented and a lot of additional effort to have it be implemented fully and conducted well. Having a clear plan and timetable for implementation is key; enlisting broad support for the program among all staff facilitates the transition.
- (9) Stability of key staff. Even this initial evaluation provides evidence of the importance of staff stability on implementation of a new program. An established program with stable key staff is a necessary precondition. One of the programs had considerable staff retention problems that continue to plague the implementation of DBT; another program is determined to follow the DBT approach, but the newness of the program has delayed full implementation,
- (10) A DBT advocate on site. The impact of a strong DBT advocate on site, and in a position with some authority seems essential for ongoing success. DBT done poorly could well be worse than whatever usual treatment was being provided.
- (11) Follow guidelines from the technology transfer literature (e.g., The Change Book, Addiction Technology Transfer Centers, 2000). The book provides additional guidelines for promoting change; only those elements that were specific to DBT implementation were mentioned here.

There are other considerations for DASA's ongoing support of DBT implementation in other programs.

- (12) Go for impact. DASA, as a public agency, must justify its actions. An effective way to do this is to look for programs that meet the guidelines identified above, where successful implementation is likely, and where there is likely to be significant changes in outcomes. This is not a recommendation to select the clinic with poor outcomes. The other factors defining program and population characteristics are probably more important.
- (13) Proceed with the implementation in a way that allows for the collection of objective, persuasive data. The program must be able and willing to participate with data collection that would allow a clear evaluation of client, staff, and program outcomes. Data must be collected prospectively, starting prior to most of the training, and a set of data that is likely to be objective, clear, and important should be identified. Some of these considerations will be presented in the section of this report on long-term evaluation.
- (14) Continue to develop methods and promote efforts at measuring success of treatment agencies in the state. Some of the best data about the impact of interventions, from the perspective of maximizing the effect of limited funds, is the evaluation of long-term outcomes across a broad array of public services and agencies. To the extent that approach is adopted, the analysis of "effectiveness" can be answered, independent of a program's ability or interest in research.

What are some possible mechanisms to support implementation?

Of course, it would be great if DASA could support all therapists/ clinics that wanted to receive training. That is unlikely to be the case in the near future. Therefore, in addition to strategically selecting the clinics to train, there are some possible ideas for funding and/or supporting implementation.

As mentioned previously, the "usual" way to learn DBT is to attend trainings conducted by Behavioral Tech, LLC. Several levels of training are offered. There are one- and two-day trainings including a DBT Overview, DBT Skills Training, DBT Individual Therapy Training, and DBT for Substance Abuse; these trainings are offered several times a year in the Pacific Northwest. The group also has trainer/consultants available to conduct a 1- or 2-day training onsite at an agency. Finally, the group offers an "intensive" training experience in which a team from the agency attends two 5-day trainings (typically out of the area), separated by several months. This approach is designed to directly assist the team with the barriers to implementation. Of course this intensive training is considerably more expensive than most agencies can afford.

DASA can assist with training, with funds from a variety of sources:

- (1) Regular budget for training and development
- (2) Grants through treatment expansion funds
- (3) CSAT grants
- (4) Funding obtained indirectly as part of a research project

- a. A NIDA-funded grant
 - b. A grant through Robert Wood Johnson, if it can be tied to a policy change
 - c. A research grant from other funding sources
- (5) Through a collaborative work with outside researchers
- a. Behavioral Tech, LLC
 - b. Other researchers/ research group
- (6) Transfer of monies from other state programs, once cost effectiveness is established.

DASA should consider having programs apply, in a standard manner, to be selected as a potential DBT site. This application process should require programs to identify how well they meet the proposed guidelines, and only the program(s) likely to be successful should be considered. Once the clinic passes an initial screening, they have to accomplish several tasks, in preparation for the adoption of DBT, prior to DASA spending money on training. At a minimum, the preparation should include establishing a team, the team visiting 1-2 other agencies in the state that have implemented DBT, establishing a detailed timeline and plan for implementation once training occurs, doing some preliminary data collection, and committing to the necessary tasks and costs associated with DBT implementation. This is a considerable effort, but no less than will be required to have DBT be fully implemented.

DASA should also consider the most cost effective way to support the training. It would be better for a few key staff to attend the 2-day trainings, along with on-site planning and preparation than to send a team to the “intensive” training. This evaluation has evidence that attendance there is no guarantee of successful implementation. At this time, there is not data to suggest that this more expensive method is self-sustaining in reduced costs. Perhaps with more long-term outcome data an argument can be made at some future time as to the wisdom of that approach.

DASA has available several program sites and different sets of materials that can be accessed by other programs. This assistance could greatly facilitate another program’s adopting DBT. DASA should try to have available for dissemination, the materials from existing programs as a possible guideline. These programs have also been very amenable to visits from other programs. This sharing of ideas and access to “real world”: implementation is invaluable.

E. Long Term Evaluation Plan

The long term evaluation of DBT could serve to bolster efforts at improving treatment, and perhaps provide support to warrant further expansion of the program, and further training efforts.

There are at four main areas which could be assessed in a long-term evaluation of DBT in Washington. The first two, adherence and fidelity to the model, are necessary to ensure that DBT is being provided. These are a necessary minimal evaluation before other outcomes are measured.

Adherence

Adherence in this report means the extent to which a program is following the structural guidelines of DBT, as delineated by Marsha Linehan. To be fully adherent, the program must, at minimum, include all five processes/ elements at the minimum frequency/duration (1) motivating the client to change (typically addressed in weekly individual therapy, 1 hour; (2) enhancing behavioral skills (addressed in weekly skills training groups, 2 hours); (3) ensuring the generalization of these skills (using phone consultations with outpatient treatment; or, milieu therapy for inpatient programs; ongoing, as needed); (4) structuring the treatment environment to support client and therapist capabilities; and (5) enhancing therapist capabilities and motivations (required attendance at a weekly DBT consultation team meeting). In addition, the materials used in the skills groups should be those developed by Marsha Linehan, or modified with her approval. Diary cards, as described in her textbook, should be used on a regular basis with all clients.

There is not a perfect way to measure this easily. One method is by using the Adherence interview, as was done with this evaluation. Ideally, the interview should be completed by several key staff, perhaps annually. The interview takes only about 15 minutes to complete. This has the added benefit of being a measure developed independently, and used by several other groups. The interview measure is included in Appendix B.

Fidelity

Fidelity, in this case, the degree to which the interactions are following DBT principles, is even more complicated to assess than adherence. Typically, in a research trial, fidelity would be assessed using a rating system of taped sessions/ groups. This is very time-consuming, complicated, and costly. It is more complicated because there has not been research indicating elements of DBT are essential, and/or how to assess the fidelity. Some work is currently underway by Linehan and colleagues specifically on this issue.

The next best approach would be to evaluate in an objective manner, each of the five necessary elements. Unfortunately, this would still be very time consuming, and there are no standard means by which to complete this evaluation.

For this project, one of the best sources of material that covered a range of staff/patient interactions was the incident log. This centralized log of all infractions, incidents, and significant events became a good source for evaluation of program fidelity. Although the expected way of utilizing this log (for a frequency count of the types of incidents) did not prove useful, it did provide an ongoing sample of staff-client interactions. The sample also allowed for evaluation of how well DBT was being used in ongoing “crisis” moments. It worked better than progress notes (which seldom had “active” incidents), or phone logs at times of crises (which occurred too infrequently), or treatment plan worksheets (which often sounded very rote).

Using a simple 5-point rating scale (1 – counter to DBT-principles, to 5 – fully congruent with the best DBT intervention), these incidents were evaluated. This methodology has several advantages: it assesses a range of personnel on staff, it uses as the basis a document that is already generated, and, in addition to allowing a evaluation of DBT fidelity, it could also be used for further training/supervision of staff. At this point, it is not possible to identify another

equally useful, practical method to evaluate DBT fidelity at a program. A sample of the rating scale used is included in Appendix B.

Program/ staff evaluations

An important factor for substance abuse treatment centers in the state is the workforce. A recent report on a survey of treatment providers in the Pacific Northwest (Gallon et al., 2003) indicates that the staff at substance abuse treatment facilities average 25% turnover a year, more than double that of all occupations across the nation (11%). A common perception is that burnout contributes to retention problems.

One factor noted by anyone interacting with the clinics that had adopted DBT was a general positive shift in staff perceptions and satisfaction. In fact, visitors comment on the changes. Because of these anecdotal reports of improved satisfaction, and the importance of retaining staff, some measure of program staff seems warranted in any long-term evaluation of DBT.

It is interesting that DBT implementation is likely to have effects on several areas likely to improve retention (i.e., ongoing trainings, career growth, and a supportive culture). Two ideas are proposed for a long-term evaluation of staff at the agencies: however, there is nothing in the published literature that suggests DBT having a positive effect on staff at treatment centers.

- (1) A periodic evaluation of staff satisfaction, including some open-ended questions on how treatment works at the agency. Ideally, this would be implemented at clinics anticipating starting a DBT program, and then repeated again annually thereafter. A preferred alternative would be to access data already collected with the DASA staff survey, if it's possible to get clinic-specific information. If no such survey currently exists, it would be worth DASA possibly developing such a survey. A pilot survey was administered at two of the clinics connected with this evaluation; the third clinic was too small for this to be meaningful.
- (2) Start a staff retention/absenteeism log at each clinic. A pilot version of this log was provided to two clinics. Recommend that any clinic anticipating to implement DBT complete the log retroactive for the past year, then maintain the log prospectively. The log is just a simple measure of three items: staff retention, reason for leaving, and absenteeism.

The combination of these two assessments would be to provide some objective and subjective data on staff outcomes (see the measures in Appendix B).

Client outcomes

The primary purpose of implementing DBT is to improve client outcomes. Ideally, the effects can be measured by readily available, objective measures of outcome.

Short-term Outcomes. Based on the preliminary data collected as part of this evaluation, some of the expected ways to see the "short-term" effects of DBT that are available in existing records include several objective measures:

- Improvements in retention (length of stay)
- Greater percentage achieving 60 days of treatment
- Increased completion rates
- Reduced rates of discharge due to rule violations

There are also several subjective measures, collected using a pilot interview (included in Appendix B). These items include:

- Client reports about what they have learned that will help them abstain
- Client reports of satisfaction with treatment received

Longer-term Outcomes. Equally important would be a prospectively done follow-up. Currently, the TARGET interview is done at discharge. It would be more useful for purposes of a further evaluation to have data collected 6-months or 12-months after discharge, using an interview protocol with established psychometric properties such as the Addiction Severity Index (ASI). The ASI is widely used in the evaluation of substance abuse treatment programs and has been incorporated into the TARGET interview. This would allow an ongoing assessment of longer-term effects of treatment, using a familiar instrument that is already available for analysis by DASA. This interview would allow evaluation of several other important areas that are not covered in administrative databases:

- Substance use
- Other associated problems (legal, family, education, etc.)

It would be useful to repeat the pilot interview at the same time, to evaluate more subjective measures over the longer-term.

Finally, it would be most useful to have information about public services utilization in the next few years after the index episode of treatment. Of particular interest would be further admissions to treatment programs, involvement with the criminal justice system, medical and psychiatric admissions, and school performance, all of which can be accessed through available administrative databases. This information would be invaluable in calculating the impact of the treatment programs, and would allow a cost-effectiveness analysis. Generating an initial version of this set of analyses is beyond the scope of this evaluation. However, completing this analysis would allow not only an important evaluation of DBT, but would also provide DASA with a tool that could be used to evaluate other programs long-term outcomes.

F. Results of Pilot Testing

Adherence and Fidelity

Adherence and fidelity measures were reported earlier in the report (Section C), and only a summary is included here.

Program/ Staff Evaluations

The two elements of staff evaluations are being piloted at Daybreak Spokane and Vancouver. The staff retention log data does not yet have sufficient data to report a summary, as they are working retrospectively to complete the log.

Data on current staff satisfaction is very positive. Of course, for these clinics, there is no valid way to get data about satisfaction at the clinic prior to DBT implementation. The satisfaction data are summarized in the table below.

	Spokane	Vancouver
Communication is good within the agency	3.2	2.5
I sometimes feel my job is meaningless	1.3	1.5
I enjoy working here	4.6	4.5
If I had a friend looking for a job, I would recommend this agency as a place to work	4.0	4.5
I feel a sense of pride in doing my job	4.6	4.0
I have a lot of control over how I do my job	3.9	3.0
I feel respected for the work I do	4.1	3.0
Clients who come to our agency are treated fairly	5.0	4.0
Clients at our agency get the best possible treatment	4.6	4.0
The work I do here really makes a difference	4.7	4.0
I am effective at my job	4.1	4.0
The level of absenteeism and tardiness is:	2.6	4.0
Turnover at the agency is:	2.4	4.0

Staff members also completed an open-ended questionnaire, looking at the time at the program prior to the implementation of DBT (if applicable), and currently. Specifically they were asked about how clients learned to not use substances, their estimation of the effectiveness of the program, and how they felt about their job.

The answers are presented in columnar format, to allow better comparison about the changes since DBT was implemented.

	Before DBT	Currently (with DBT)
How do/did clients learn to not use alcohol and drugs?	<ul style="list-style-type: none"> • Motivation enhancement • Relapse prevention, general • 12-step (6 responses) • Education/ didactic (4 responses) • Support (2) • Group therapy (2) • Family therapy (3) 	<ul style="list-style-type: none"> • Motivation • Relapse prevention (3) • 12-step (4) • Education/ didactic (3) • Developing a support system • Family therapy • Coping with not using (2)

	<ul style="list-style-type: none"> • Individual therapy (2) • Recreational program • Role play • Avoid peers who use (3) • Coping without drugs • Triggers • Healthy activities (2) • Talk about working through urges • Learn to deal with feelings 	<ul style="list-style-type: none"> • Learn to deal with feelings (2) • Specific DBT skills (7) • Skills training, general (7)
How effective is /was the treatment?	<ul style="list-style-type: none"> • Very effective (2) • Effective (2) • Pretty effective in those w/o significant problems; otherwise not very effective • Effective if client was ready to change • Many able to stay clean • Many able to change; some struggled • Many learned what they needed to start recovery; many weren't ready to change • Uncertain (3) 	<ul style="list-style-type: none"> • Better than before (5) • 63% complete program • Most make good progress • Okay • May have more clients relapse after discharge • More critical incidents now as we changed from points to diary cards • Uncertain
How do/did you feel about your job?	<ul style="list-style-type: none"> • Very good (3) • Pretty good • Hard, but rewarding • Okay • I knew it was hard on my soul; couldn't do it for life. • I knew we couldn't change them • Hard to tell if clients benefited • Frustrating (2) • Hard, stressful (3) 	<ul style="list-style-type: none"> • Better than before (2) • Love my job • The group is a good team • Very good • The drama has decreased • Better able to do groups and therapy • More confident that clients are doing well • It's hard

Client Outcomes

A brief survey, with open-ended questions was given to a number of clients regarding their experience at the current program (using DBT), and their experiences at other treatment programs. Not unexpectedly, given the small sample and the nature of the questions, the responses are difficult to interpret. Comments regarding what was different about learning to not use drugs/ alcohol, or the content of the program include:

<p>How was treatment here different than other treatment?</p>	<ul style="list-style-type: none"> • They don't teach you as good skills at other treatment centers. • Here, I actually did work and learned some things that will help me. • I learned that my emotion problems and family problems lead to my use, and taught me how to deal with them. •
<p>What did you learn that was helpful?</p>	<ul style="list-style-type: none"> • Basically just skills, how to use them. And, I definitely learned that if I was ever in an emotional state of mind I could use my skills. • I learned all the skills that you teach here, to be used in my everyday life. I've learned to not focus on other people so much, buy on myself and my recovery. • How to do the skills and keep my anger under control. • Radical acceptance was the best one and Let Go Let God. • I learned how to deal with my emotions and how to control them better. I learned skills that will help me stay sober when I leave. • The DBT skills are very helpful for me to deal with my emotion and family problems without me stressing myself out about it. • That there are skills I can use to deal with any situation. If I an use them to their fullest extent I will be successful and stay clean. • That when I fall I could always handle my anger in a positive manner, the skills that I've learned I know can help in tough situations on the outside. • How to stay clean and sober. • Dealing with things a day at a time is the best method. • Learning that there is a lot of sober people in the world. • Don't know (5)
<p>In your opinion, how is DBT different ... better or worse ... than other treatment?</p>	<ul style="list-style-type: none"> • I think it's better because it pinpoints problematic behaviors and shows you different positive ways to deal with your emotions. • Better – it actually teaches you something useful. • Cause they give you something to use when in tough situations, so I think DBT helps you a lot in your recovery. • I think that the skills here are real; they are skills that you can use daily and I think that they work.

	<ul style="list-style-type: none">• Better because you can't relapse in here. The skills work, they're going to help me I know that.• It has been more effective than all the other ways people tried to help me to not use drugs and/or alcohol.• Better, because they give you different ways to stop or calm yourself before you do something you don't want to do.• It is helpful.• You guys teach way more useful things.• Teaching me methods on controlling my attitude.• Better. Good groups that are very specific about their steps and skills.• Makes me feel better about myself.
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- Swenson, C.R., Sanderson, C., Dulit, R.A., & Linehan, M.M. (2001). The application of dialectical behavior therapy for patients with borderline personality disorder on inpatient units. *Psychiatric Quarterly*, 72(4):307-324.
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Appendix A.

Annotated Bibliography

- Bohus, M., Haaf, B., Simms, T., Limberger, M.F., Schmahl, C., Unckel, C., Lieb, K., & Linehan, M.M. (2004). Effectiveness of inpatient dialectical behavioral therapy for borderline personality disorder: a controlled trial. *Behaviour Research and Therapy*, 42(5):487-499. Dialectical Behavioral Therapy (DBT) was initially developed and evaluated as an outpatient treatment program for chronically suicidal individuals meeting criteria for borderline personality disorder (BPD). Within the last few years, several adaptations to specific settings have been developed. This study aims to evaluate a three-month DBT inpatient treatment program. Clinical outcomes, including changes on measures of psychopathology and frequency of self-mutilating acts, were assessed for 50 female patients meeting criteria for BPD. Thirty-one patients had participated in a DBT inpatient program, and 19 patients had been placed on a waiting list and received treatment as usual in the community. Post-testing was conducted four months after the initial assessment (i.e. four weeks after discharge for the DBT group). Pre-post-comparison showed significant changes for the DBT group on 10 of 11 psychopathological variables and significant reductions in self-injurious behavior. The waiting list group did not show any significant changes at the four-months point. The DBT group improved significantly more than participants on the waiting list on seven of the nine variables analyzed, including depression, anxiety, interpersonal functioning, social adjustment, global psychopathology and self-mutilation. Analyses based on Jacobson's criteria for clinically relevant change indicated that 42% of those receiving DBT had clinically recovered on a general measure of psychopathology. The data suggest that three months of inpatient DBT treatment is significantly superior to non-specific outpatient treatment. Within a relatively short time frame, improvement was found across a broad range of psychopathological features. Stability of the recovery after one month following discharge, however, was not evaluated and requires further study.
- Bohus, M., Haaf, B., Stiglmayr, C., Pohl, U., Bohme, R., & Linehan, M. (2000). Evaluation of inpatient dialectical-behavioral therapy for borderline personality disorder--a prospective study. *Behaviour Research and Therapy*, 38(9):875-887. Dialectical-Behavioral Therapy for Borderline Personality Disorder (DBT) developed by M. Linehan is specifically designed for the outpatient treatment of chronically suicidal patients with borderline personality disorder. Research on DBT therapy, its course and its results has focused to date on treatments in an outpatient setting. Hypothesizing that the course of therapy could be accelerated and improved by an inpatient setting at the beginning of outpatient DBT, we developed a treatment program of inpatient therapy for this patient group according to the guidelines of DBT. It consists of a three-month inpatient treatment prior to long-term outpatient therapy. In this pilot study 24 female patients were compared at admission to the hospital, and at one month after discharge with respect to psychopathology and frequency of self-injuries. Significant improvements in ratings of depression, dissociation, anxiety and global stress were found. A highly significant decrease in the number of parasuicidal acts was also reported. Analysis of the average effect sizes shows a strong effect which prompts the development of a randomized controlled design.

Dimeff, L., Linehan, M.M. (2001) Dialectical Behavior Therapy in a nutshell. *The California Psychologist*, 34(3), 10-13.

Dimeff, L., Rizvi, S.L., Brown, M., Linehan, M.M. (2000). Dialectical behavior therapy for substance abuse: A pilot application to methamphetamine-dependent women with borderline personality disorder. *Cognitive and Behavioral Practice*, 7, 457-468/

Hampton, M.C. (1997). Dialectical behavior therapy in the treatment of persons with borderline personality disorder. *Archives of Psychiatric Nursing*, 11(2):96-101. Highly suicidal, borderline patients are difficult to treat within the hospital and the community. The institution of managed care necessitates that care for these and other chronically hospitalized populations take place in the community. Psychotherapy has shown moderate success for some borderlines, however, treatment attrition is a significant problem. Without an intervention that successfully maintains suicidal borderline patients in therapy, either more costly methods of treatment must be used or death will result. A form of cognitive-behavioral therapy called dialectical behavior therapy has shown a high rate of effectiveness in reducing inpatient hospital days, suicide attempt frequency, and therapy attrition.

Hawkins, K.A., & Sinha, R. (1998). Can line clinicians master the conceptual complexities of dialectical behavior therapy? An evaluation of a State Department of Mental Health training program. *Journal of Psychiatric Research*, 32(6):379-384. Dialectical behavior therapy for borderline personality disorder has rapidly attained wide-spread popularity, with one indication being the development of training initiatives by the Department of Mental Health within at least two States in USA. Efficacy data published by the originator of the treatment, Marsha Linehan, and her colleagues, probably accounts at least in part for this popularity. However, the complexity of DBT raises a fundamental question regarding these broader applications: can clinicians of diverse backgrounds acquire a shared and sophisticated understanding of the treatment theory? The clinical utility of a treatment rests heavily upon ease of dissemination (APA, Template for developing guidelines: Interventions for mental disorders and psychosocial aspects of physical disorders. Washington, DC: Author, 1995), and in that regard DBT--a complicated, multifaceted approach--could appear vulnerable. This vulnerability is heightened when institutional adoption involves the collaboration of numerous clinicians, who, despite occupying diverse roles, must nevertheless develop a shared understanding of the treatment. Using a detailed examination of DBT knowledge, we evaluated the conceptual mastery of 109 clinicians trained via a State Department of Mental Health initiative. Performance on the examination correlated specifically with DBT training. Prior education or background in behavior therapy accounted for little variance, indicating that clinicians occupying diverse roles acquired reasonable intellectual mastery over this complex model.

Hoffman, P.D., Fruzzetti, A.E., & Swenson, C.R. (1999). Dialectical behavior therapy--family skills training. *Family Processes*, 38(4):399-414. Over the past three decades, family interventions have become important components of treatment for a number of psychiatric disorders. To date, however, there has been no family treatment designed specifically for borderline personality disorder patients and their relatives. This article describes one short-

term family intervention called Dialectical Behavior Therapy-Family Skills Training. Based on Linehan's Dialectical Behavior Therapy (DBT), borderline patients' behavioral patterns are thought to result from a lifelong transaction between emotional vulnerability and invalidating features of the social and familial environment. Individual DBT focuses on reducing individual emotion dysregulation and vulnerability and enhancing individual stability. The complementary family interventions proposed in this article aim to: 1) provide all family members an understanding of borderline behavioral patterns in a clear, nonjudgmental way; 2) enhance the contributions of all family members to a mutually validating environment; and 3) address all family members' emotion regulation and interpersonal skills deficits.

Katz, L.Y., Cox, B.J., Gunasekara, S., & Miller, A.L. (2004). Feasibility of dialectical behavior therapy for suicidal adolescent inpatients. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43(3):276-282. **OBJECTIVE:** To evaluate the feasibility of dialectical behavior therapy (DBT) implementation in a general child and adolescent psychiatric inpatient unit and to provide preliminary effectiveness data on DBT versus treatment as usual (TAU). **METHOD:** Sixty-two adolescents with suicide attempts or suicidal ideation were admitted to one of two psychiatric inpatient units. One unit used a DBT protocol and the other unit relied on TAU. Assessments of depressive symptoms, suicidal ideation, hopelessness, parasuicidal behavior, hospitalizations, emergency room visits, and adherence to follow-up recommendations were conducted before and after treatment and at 1-year follow-up for both groups. In addition, behavioral incidents on the units were evaluated. **RESULTS:** DBT significantly reduced behavioral incidents during admission when compared with TAU. Both groups demonstrated highly significant reductions in parasuicidal behavior, depressive symptoms, and suicidal ideation at 1 year. **CONCLUSIONS:** DBT can be effectively implemented in acute-care child and adolescent psychiatric inpatient units. The promising results from this pilot study suggest that further evaluation of DBT for adolescent inpatients appears warranted.

Koons, C.R., Robins, C.J., Tweed, J. L., Lynch, T.R., Gonzalez, A.M., Morse, J.Q., Bishop, G. K., Butterfield, M.I., Bastian, L.A. (2001). Efficacy of Dialectical Behavior Therapy in Women Veterans With Borderline Personality Disorder. *Behavior Therapy*. 32(2) 371-390. Twenty women veterans who met criteria for borderline personality disorder (BPD) were randomly assigned to Dialectical Behavior Therapy (DBT) or to treatment as usual (TAU) for 6 months. Compared with patients in TAU, those in DBT reported significantly greater decreases in suicidal ideation, hopelessness, depression, and anger expression. In addition, only patients in DBT demonstrated significant decreases in number of parasuicidal acts, anger experienced but not expressed, and dissociation, and a strong trend on number of hospitalizations, although treatment group differences were not statistically significant on these variables. Patients in both conditions reported significant decreases in depressive symptoms and in number of BPD criterion behavior patterns, but no decrease in anxiety. Results of this pilot study suggest that DBT can be provided effectively independent of the treatment's developer, and that larger efficacy and effectiveness studies are warranted.

Koerner K, Linehan MM. (2000). Research on dialectical behavior therapy for patients with borderline personality disorder. *Psychiatric Clinics North America*, 23(1):151-167. Research evidence to date indicates that, although DBT was developed for the treatment of patients

with suicidal behavior, it can be adapted to treat BPD patients with comorbid substance-abuse disorder and be extended to other patient populations and the treatment of other disorders. Across studies, DBT seems to reduce severe dysfunctional behaviors that are targeted for intervention (e.g., parasuicide, substance abuse, and binge eating), enhance treatment retention, and reduce psychiatric hospitalization. Evidence suggests that additional research is warranted to examine which components of DBT contribute to outcomes. Although preliminary, skills coaching seems to be a crucial ingredient in producing reductions in parasuicidal behavior, and specific strategies (e.g., validation, balance of change, and acceptance interventions) may play an important role in positive behavioral change. Several investigators are evaluating the efficacy of DBT. For example, Asberg et al at the Karolinska Institute in Sweden have begun a pilot study comparing DBT for women who have made multiple suicide attempts to transference focus psychotherapy, a psychodynamic therapy developed by Kernberg. They have planned a randomized clinical trial to compare DBT and transference focus psychotherapy with TAU in the community. van den Bosch has completed a randomized clinical trial for women who met criteria for BPD and substance abuse comparing DBT-S with TAU. Lynch is conducting a randomized clinical trial examining the efficacy of DBT skills training plus medication versus medication only for the treatment of moderate to severe depression in the elderly. Results from these studies should become available over the next several years, providing further empiric evidence by which to evaluate the efficacy of DBT. Additional development of DBT seems warranted to improve its efficacy, and additional investigation is needed to establish its effectiveness in public health settings. Analyses from existing data sets of factors that predict treatment response and elements of the treatment that contribute to outcome are needed. Also, longitudinal follow-up studies to determine suicide rates and maintenance of treatment gains are needed. Because DBT has been adopted in a variety of clinical settings, effectiveness studies are needed. Given the difficulty of conducting treatment research with chronically suicidal individuals, perhaps the largest challenge to further treatment development is recruiting young investigators who are willing to conduct research in this area. Nevertheless, in the 6 years since the treatment manuals were published, DBT seems to be a step toward more effective treatment for severely multidisordered patients.

Linehan, M.M., Tutek, D.A., Heard, H.L., & Armstrong, H.E., (1994). Interpersonal outcome of cognitive behavioral treatment for chronically suicidal borderline patients. *American Journal of Psychiatry*, 151(12):1771-1776. **OBJECTIVE:** This study reports the efficacy of a cognitive behavioral outpatient treatment on interpersonal outcome variables for patients diagnosed with borderline personality disorder. **METHOD:** In a 1-year clinical trial, 26 female patients with borderline personality disorder were randomly assigned to either dialectical behavior therapy or a treatment-as-usual comparison condition. All subjects met criteria of DSM-III-R and Diagnostic Interview for Borderline Patients for borderline personality disorder and were chronically suicidal. **RESULTS:** In both the intent-to-treat and treatment completion groups, dialectical behavior therapy subjects had significantly better scores on measures of anger, interviewer-rated global social adjustment, and the Global Assessment Scale and tended to rate themselves better on overall social adjustment than treatment-as-usual subjects. **CONCLUSIONS:** These results suggest that dialectical behavior therapy is a promising psychosocial intervention for improving interpersonal functioning among severely dysfunctional patients with borderline personality disorder.

- Linehan, M.M. (1993). Dialectical behavior therapy for treatment of borderline personality disorder: implications for the treatment of substance abuse. *NIDA Research Monograph*, 137:201-216.
- Linehan, M.M. (1987). Dialectical behavior therapy for borderline personality disorder. Theory and method. *Bulletin of the Menninger Clinic*, 51(3):261-76.
- Linehan, M.M. (1993). Dialectical behavior therapy for treatment of borderline personality disorder: Implications for the treatment of substance abuse. *NIDA Research Monograph*, 137:201-216.
- Linehan, M.M. (1995). Combining pharmacotherapy with psychotherapy for substance abusers with borderline personality disorder: strategies for enhancing compliance. *NIDA Research Monograph*, 150:129-142. DBT is a comprehensive, behaviorally oriented treatment designed for highly dysfunctional individuals meeting criteria for BPD. Many of these criteria are characteristic of drug abusers, and some of the problems encountered in treatment of drug abusers, especially when various treatments are combined, are similar. The basic armamentarium of the DBT therapist is the balancing of validation and acceptance treatment strategies with problem-solving procedures, including contingency management, exposure-based procedures, cognitive modification, and skills training. In addition, a number of specific strategies have been woven together to enhance compliance and to reduce the staff splitting that is so frequent with this population. Those described in this chapter include orienting and commitment strategies and the focus in DBT on reducing therapy-interfering behavior and on consultation with the client rather than with the client's network.
- Linehan, M.M., Armstrong, H.E., Suarez, A., Allmon, D., & Heard, H.L. (1991). Cognitive-behavioral treatment of chronically parasuicidal borderline patients. *Archives of General Psychiatry*, 48(12):1060-1064. A randomized clinical trial was conducted to evaluate the effectiveness of a cognitive-behavioral therapy, ie, dialectical behavior therapy, for the treatment of chronically parasuicidal women who met criteria for borderline personality disorder. The treatment lasted 1 year, with assessment every 4 months. The control condition was "treatment as usual" in the community. At most assessment points and during the entire year, the subjects who received dialectical behavior therapy had fewer incidences of parasuicide and less medically severe parasuicides, were more likely to stay in individual therapy, and had fewer inpatient psychiatric days. There were no between-group differences on measures of depression, hopelessness, suicide ideation, or reasons for living although scores on all four measures decreased throughout the year.
- Linehan, M.M., Dimeff, L.A., Reynolds, S.K., Comtois, K.A., Welch, S.S., Heagerty, P., & Kivlahan, D.R. (2002). Dialectical behavior therapy versus comprehensive validation therapy plus 12-step for the treatment of opioid dependent women meeting criteria for borderline personality disorder. *Drug and Alcohol Dependence*, 67(1):13-26. We conducted a randomized controlled trial to evaluate whether dialectical behavior therapy (DBT), a treatment that synthesizes behavioral change with radical acceptance strategies, would be more effective for heroin-dependent women with borderline personality disorder (N = 23)

than Comprehensive Validation Therapy with 12-Step (CVT + 12S), a manualized approach that provided the major acceptance-based strategies used in DBT in combination with participation in 12-Step programs. In addition to psychosocial treatment, subjects also received concurrent opiate agonist therapy with adequate doses of LAAM (thrice weekly; modal dose 90/90/130 mg). Treatment lasted for 12 months. Drug use outcomes were measured via thrice-weekly urinalyses and self-report. Three major findings emerged. First, results of urinalyses indicated that both treatment conditions were effective in reducing opiate use relative to baseline. At 16 months post-randomization (4 months post-treatment), all participants had a low proportion of opiate-positive urinalyses (27% in DBT; 33% in CVT + 12S). With regard to between-condition differences, participants assigned to DBT maintained reductions in mean opiate use through 12 months of active treatment while those assigned to CVT + 12S significantly increased opiate use during the last 4 months of treatment. Second, CVT + 12S retained all 12 participants for the entire year of treatment, compared to a 64% retention rate in DBT. Third, at both post-treatment and at the 16-month follow-up assessment, subjects in both treatment conditions showed significant overall reductions in level of psychopathology relative to baseline. A noteworthy secondary finding was that DBT participants were significantly more accurate in their self-report of opiate use than were those assigned to CVT + 12S.

Linehan, M.M., Heard, H.L., & Armstrong, H.E. (1993). Naturalistic follow-up of a behavioral treatment for chronically parasuicidal borderline patients. *Archives of General Psychiatry*, 50(12):971-974. BACKGROUND: A randomized clinical trial was conducted to evaluate whether the superior performance of dialectical behavior therapy (DBT), a psychosocial treatment for borderline personality disorder, compared with treatment-as-usual in the community, is maintained during a 1-year posttreatment follow-up. METHODS: We analyzed 39 women who met criteria for borderline personality disorder, defined by Gunderson's Diagnostic Interview for Borderline Personality Disorder and DSM-III-R criteria, and who had a history of parasuicidal behavior. Subjects were randomly assigned either to 1 year of DBT, a cognitive behavioral therapy that combines individual psychotherapy with group behavioral skills training, or to treatment-as-usual, which may or may not have included individual psychotherapy. Efficacy was measured on parasuicidal behavior (Parasuicide History Interview), psychiatric inpatient days (Treatment History Interview), anger (State-Trait Anger Scale), global functioning (Global Assessment Scale), and social adjustment (Social Adjustment Scale--Interview and Social Adjustment Scale--Self-Report). Subjects were assessed at 6 and 12 months into the follow-up year. RESULTS: Comparison of the two conditions revealed that throughout the follow-up year, DBT subjects had significantly higher Global Assessment Scale scores. During the initial 6 months of the follow-up, DBT subjects had significantly less parasuicidal behavior, less anger, and better self-reported social adjustment. During the final 6 months, DBT subjects had significantly fewer psychiatric inpatient days and better interviewer-rated social adjustment. CONCLUSION: In general, the superiority of DBT over treatment-as-usual, found in previous studies at the completion of 1 year of treatment, was retained during a 1-year follow-up.

Linehan, M.M., Schmidt, H. 3rd, Dimeff, L.A., Craft, J.C., Kanter, J., & Comtois, K.A. (1999). Dialectical behavior therapy for patients with borderline personality disorder and drug-dependence. *American Journal on Addictions*, 8(4):279-292. A randomized clinical trial was

conducted to evaluate whether Dialectical Behavior Therapy (DBT), an effective cognitive-behavioral treatment for suicidal individuals with borderline personality disorder (BPD), would also be effective for drug-dependent women with BPD when compared with treatment-as-usual (TAU) in the community. Subjects were randomly assigned to either DBT or TAU for a year of treatment. Subjects were assessed at 4, 8, and 12 months, and at a 16-month follow-up. Subjects assigned to DBT had significantly greater reductions in drug abuse measured both by structured interviews and urinalyses throughout the treatment year and at follow-up than did subjects assigned to TAU. DBT also maintained subjects in treatment better than did TAU, and subjects assigned to DBT had significantly greater gains in global and social adjustment at follow-up than did those assigned to TAU. DBT has been shown to be more effective than treatment-as-usual in treating drug abuse in this study, providing more support for DBT as an effective treatment for severely dysfunctional BPD patients across a range of presenting problems.

Lynch, T.R., Morse, J.Q., Mendelson, T., & Robins, C.J. (2003). Dialectical behavior therapy for depressed older adults: a randomized pilot study. *American Journal of Geriatric Psychiatry*, 11(1):33-45. **OBJECTIVE:** Although there is evidence for the efficacy of antidepressants and for some individual and group psychotherapy interventions for depressed older adults, a significant number of these do not respond to treatment. Authors assessed the benefits of augmenting medication with group psychotherapy. **METHODS:** They randomly assigned 34 (largely chronically) depressed individuals age 60 and older to receive 28 weeks of antidepressant medication plus clinical management, either alone (MED) or with the addition of dialectical behavior therapy skills-training and scheduled telephone coaching sessions (MED+DBT). **RESULTS:** Only MED+DBT showed significant decreases on mean self-rated depression scores, and both treatment groups demonstrated significant and roughly equivalent decreases on interviewer-rated depression scores. However, on interviewer-rated depression, 71% of MED+DBT patients were in remission at post-treatment, in contrast to 47% of MED patients. At a 6-month follow-up, 75% of MED+DBT patients were in remission, compared with only 31% of MED patients, a significant difference. Only patients receiving MED+DBT showed significant improvements from pre- to post-treatment on dependency and adaptive coping that are proposed to create vulnerability to depression. **CONCLUSION:** Results from this pilot study suggest that DBT skills training and telephone coaching may offer promise to effectively augment the effects of antidepressant medication in depressed older adults.

McMain S, Korman LM, Dimeff L. (2001). Dialectical behavior therapy and the treatment of emotion dysregulation. *Journal of Clinical Psychology*, 57(2):183-196. Borderline personality disorder (BPD) is a disorder characterized by severe disturbances in emotion regulation. In Dialectical Behavior Therapy (DBT), affect dysregulation is seen as a consequence of a transaction between a biological predisposition to emotion vulnerability and invalidating environmental experiences. In the past few years, a growing body of research has accumulated demonstrating the efficacy of DBT in treating severely disordered, chronically suicidal, and substance-dependent individuals with BPD. This article describes a DBT approach to the treatment of emotion regulation in individuals with BPD.

Miller, A.L. (1999). Dialectical behavior therapy: a new treatment approach for suicidal adolescents. *American Journal of Psychotherapy*, 53(3):413-417. Suicide accounts for more

adolescent deaths in the US than all natural causes combined and ranks as the third leading cause of death among 15- to 19-year-olds. Miller explores what is being done to effectively treat these suicidal multi-problem adolescents.

Miller, A.L., Glinski, J., Woodberry, K.A., Mitchell, A.G., & Indik, J. (2002). Family therapy and dialectical behavior therapy with adolescents: Part I: Proposing a clinical synthesis. *American Journal of Psychotherapy*, 56(4):568-584. Although the practice of family therapy in dialectical behavior therapy (DBT) with multiproblem suicidal adolescents is common and generally indicated, a particular model has yet to be delineated with this age group. The purpose of this article is to propose a coherent clinical synthesis of the more individually oriented DBT strategies with a broader family-systems orientation that maintains the integrity of both theoretical approaches while addressing the treatment needs of adolescents and their families. First, the authors briefly review the literature. Second, they describe the core dialectic of DBT, balancing acceptance and change, and its relevance to family therapy. Finally, the authors propose several specific acceptance and change strategies useful when implementing DBT family therapy with multi-problem adolescents.

Palmer, R.L., Birchall, H., Damani, S., Gatward, N., McGrain, L., & Parker, L. (2003). A dialectical behavior therapy program for people with an eating disorder and borderline personality disorder--description and outcome. *International Journal of Eating Disorders*, 33(3):281-286. **OBJECTIVE:** To describe and evaluate a full dialectical behavior therapy (DBT) program for people with comorbid eating disorder and borderline personality disorder. The program included a novel skills training module written especially for eating-disordered patients. **METHOD:** The program was run for 18 months. Days in hospital and major acts of self-harm were counted for the 18 months before and after DBT. **RESULTS:** There were no dropouts from the program. The patients seemed to benefit. Most patients were neither eating disordered nor self-harming at follow-up. **DISCUSSION:** Full DBT is an expensive and demanding treatment but deserves consideration for patients with an eating disorder and comorbid borderline personality disorder and self-harm. There is a need for a more systematic and thorough evaluation.

Perseus, K.I., Ojehagen, A., Ekdahl, S., Asberg, M., & Samuelsson, M. (2003). Treatment of suicidal and deliberate self-harming patients with borderline personality disorder using dialectical behavioral therapy: the patients' and the therapists' perceptions. *Archives of Psychiatric Nursing*, 17(5):218-227. The aim was to investigate patients and therapists perception of receiving and giving dialectical behavioral therapy (DBT). Ten deliberate self-harm patients with borderline personality disorder and four DBT-therapists were interviewed. The interviews were analyzed with qualitative content analysis. The patients unanimously regard the DBT-therapy as life saving and something that has given them a bearable life situation. The patients and the therapists are concordant on the effective components of the therapy: the understanding, respect, and confirmation in combination with the cognitive and behavioral skills. The experienced effectiveness of DBT is contrasted by the patient's pronouncedly negative experiences from psychiatric care before entering DBT.

Rathus, J.H., & Miller, A.L. (2002). Dialectical behavior therapy adapted for suicidal adolescents. *Suicide and Life Threatening Behavior*, 32(2):146-157. We report a quasi-

experimental investigation of an adaptation of Dialectical Behavior Therapy (DBT) with a group of suicidal adolescents with borderline personality features. The DBT group (n = 29) received 12 weeks of twice weekly therapy consisting of individual therapy and a multifamily skills training group. The treatment as usual (TAU) group (n = 82) received 12 weeks of twice weekly supportive-psychodynamic individual therapy plus weekly family therapy. Despite more severe pre-treatment symptomatology in the DBT group, at post-treatment this group had significantly fewer psychiatric hospitalizations during treatment, and a significantly higher rate of treatment completion than the TAU group. There were no significant differences in the number of suicide attempts made during treatment. Examining pre-post change within the DBT group, there were significant reductions in suicidal ideation, general psychiatric symptoms, and symptoms of borderline personality. DBT appears to be a promising treatment for suicidal adolescents with borderline personality characteristics.

Robins, C.J., & Chapman, A.L. (2004). Dialectical behavior therapy: current status, recent developments, and future directions. *Journal of Personality Disorders*, 18(1):73-89. Dialectical behavior therapy (DBT) was developed as a treatment for parasuicidal women with borderline personality disorder and has been adapted for several other populations. This article describes standard DBT and several adaptations of it and reviews outcome studies with borderline patients in outpatient, inpatient, and crisis intervention settings, borderline patients with substance use disorders, suicidal adolescents, patients with eating disorders, inmates in correctional settings, depressed elders, and adults with attention-deficit/hyperactivity disorder. This treatment outcome review is followed by discussion of predictors of change in DBT, possible mechanisms of change, and current developments in theory, practice, and research.

Rizvi, S.L., & Linehan, M.M. (2001). Dialectical behavior therapy for personality disorders. *Current Psychiatry Reports*, 3(1):64-69. Interest in dialectical behavior therapy (DBT) as a treatment for personality disorders has increased dramatically in recent years. Although originally designed for the outpatient treatment of suicidal individuals with borderline personality disorder (BPD), DBT has been applied to many more diverse populations including comorbid substance dependence and BPD, inpatient treatment for BPD, as well as antisocial behaviors in juveniles and adults. This paper provides a brief overview of DBT, presents and evaluates the most recent literature on the application of DBT to the treatment of personality disorders, and highlights some of the current controversies surrounding the use of DBT.

Safer DL, Lively TJ, Telch CF, Agras WS. (2002). Predictors of relapse following successful dialectical behavior therapy for binge eating disorder. *International Journal of Eating Disorders*, 32(2):155-163. **OBJECTIVE:** To identify predictors of relapse at 6-month follow-up for women with binge eating disorder (BED). **METHOD:** Participants were 32 women with BED who had initially achieved abstinence from binge eating after 20 weeks of dialectical behavior therapy (DBT) adapted for patients with BED. Posttreatment predictor variables included the subscales Restraint, Weight Concerns, and Shape Concerns from the Eating Disorders Examination (EDE), the Emotional Eating Scale score, the Rosenberg Self-Esteem Scale, body mass index, and early versus late age of binge eating onset. **RESULTS:** The largest effect sizes for predicting relapse were found with early onset of binge eating and higher EDE Restraint scores. **DISCUSSION:** Previous findings that earlier age of onset (age

16 years or younger) is linked to less successful treatment outcome are now extended to the 6-month follow-up assessment. The finding that higher restraint scores after treatment predict relapse adds to the literature concerning the role of restraint in patients with BED.

Safer, D.L., Telch, C.F., & Agras, W.S. (2001). Dialectical behavior therapy for bulimia nervosa. *American Journal of Psychiatry*, 158(4):632-634. **OBJECTIVE:** The effects of dialectical behavior therapy adapted for the treatment of binge/purge behaviors were examined. **METHOD:** Thirty-one women (averaging at least one binge/purge episode per week) were randomly assigned to 20 weeks of dialectical behavior therapy or 20 weeks of a waiting-list comparison condition. The manual-based dialectical behavior therapy focused on training in emotion regulation skills. **RESULTS:** An intent-to-treat analysis showed highly significant decreases in binge/purge behavior with dialectical behavior therapy compared to the waiting-list condition. No significant group differences were found on any of the secondary measures. **CONCLUSIONS:** The use of dialectical behavior therapy adapted for treatment of bulimia nervosa was associated with a promising decrease in binge/purge behaviors.

Shearin, E.N., & Linehan, M.M. (1994). Dialectical behavior therapy for borderline personality disorder: theoretical and empirical foundations. *Acta Psychiatrica Scandinavica*, 379(Supplement):61-68. Dialectical behavior therapy (DBT) is a cognitive-behavioral psychotherapy developed by Linehan for parasuicidal patients with a diagnosis of borderline personality disorder (BPD). DBT is based on a biosocial theory that views BPD as primarily a dysfunction of the emotion regulation system. The treatment is organized around a hierarchy of behavioral goals that vary in different modes of therapy. In two randomized trials, DBT has shown superiority in reducing parasuicide, medical risk of parasuicides, number of hospital days, dropout from treatment and anger while improving social adjustment. Most gains were maintained through a 1-year follow-up. In one process study testing DBT theory, dialectical techniques balancing acceptance and change were more effective than pure change or acceptance techniques in reducing suicidal behavior.

Simpson, E.B., Pistorello, J., Begin, A., Costello, E., Levinson, J., Mulberry, S., Pearlstein, T., Rosen, K., & Stevens, M. (1998). Use of dialectical behavior therapy in a partial hospital program for women with borderline personality disorder. *Psychiatric Services*, 49(5):669-673. Dialectical behavior therapy, an outpatient psychosocial treatment for chronically suicidal women with borderline personality disorder, has been adapted for use in a partial hospital program for women. Patients attend the program for a minimum of five days of individual and group therapy, and full census is 12 women. About 65 percent of participants meet at least three criteria for borderline personality disorder, and most have suicidal and self-injurious behavior. Their comorbid diagnoses include trauma-related diagnoses and anxiety disorders, severe eating disorders, substance abuse, and depression. The partial hospital program is linked to an aftercare program offering six months of outpatient skills training based on dialectical behavior therapy. Both programs focus on teaching patients four skills: mindfulness (attention to one's experience), interpersonal effectiveness, emotional regulation, and distress tolerance. Two years of operation of the women's partial hospital program provides promising anecdotal evidence that dialectical behavioral therapy, an outpatient approach, can be effectively modified for partial hospital settings and a more diverse population.

Simpson, E.B., Yen, S., Costello, E., Rosen, K., Begin, A., Pistorello, J., Pearlstein, T. (2004). Combined dialectical behavior therapy and fluoxetine in the treatment of borderline personality disorder. *Journal of Clinical Psychiatry*, 65(3):379-385. **BACKGROUND:** This study examines the therapeutic effect of fluoxetine, a selective serotonin reuptake inhibitor, added to dialectical behavior therapy (DBT), an empirically supported psychosocial therapy, for the treatment of borderline personality disorder. **METHOD:** This is a 12-week, randomized, double-blind, placebo-controlled study of patients with borderline personality disorder (identified using the Structured Clinical Interview for DSM-IV Axis II Disorders). All subjects received individual and group DBT. Of the 20 subjects that completed treatment, 9 were randomly assigned to receive up to 40 mg/day of fluoxetine and 11 were randomly assigned to the placebo condition. Subjects were evaluated at baseline and at week 10 or 11 on self-report measures of depression, anxiety, anger expression, dissociation, and global functioning. The study was conducted between January 1998 and February 2000. **RESULTS:** Time-by-group interaction effects revealed no significant group differences in scores from pre-treatment to posttreatment on any measure. However, within the DBT/placebo group, there were significant pretreatment/posttreatment differences in the direction of improvement on all measures. No significant pre-treatment/posttreatment differences were found within the DBT/fluoxetine condition. **CONCLUSION:** The data suggest that adding fluoxetine to an efficacious psychosocial treatment does not provide any additional benefits. Further studies with larger sample sizes are warranted.

Swenson, C.R., Sanderson, C., Dulit, R.A., & Linehan, M.M. (2001). The application of dialectical behavior therapy for patients with borderline personality disorder on inpatient units. *Psychiatric Quarterly*, 72(4):307-324. Inpatient treatment of individuals with borderline personality disorder (BPD) is typically fraught with difficulty and failure. Patients and staff often become entangled in intense negative therapeutic spirals that obliterate the potential for focused, realistic, and effective treatment interventions. We describe an inpatient treatment approach to BPD patients which is an application of Dialectical Behavior Therapy (DBT), a cognitive-behavioral therapy for patients with BPD which has been shown to be effective in reducing suicidal behavior, hospitalization, and treatment dropout and improving interpersonal functioning and anger management. The inpatient DBT staff creates a validating treatment milieu and focuses on orienting and educating new patients and identifying and prioritizing their treatment targets. Inpatient DBT treatment techniques include contingency management procedures, skills training and coaching, behavioral analysis, structured response protocols to suicidal and egregious behaviors on the unit, and consultation team meetings for DBT staff.

Swenson, C.R., Torrey, W.C., & Koerner, K. (2002). Implementing dialectical behavior therapy. *Psychiatric Services*, 53(2):171-178. Dialectical behavior therapy (DBT) is a cognitive-behavioral approach to treating borderline personality disorder. Early empirical results are promising, although they are not sufficient to establish DBT as an evidence-based practice in community settings. Nevertheless, the treatment has been widely implemented by mental health authorities, program leaders, and clinicians. The authors describe DBT's four stages of treatment, the functional areas addressed, and the treatment modes used as well as the reasons for the appeal of DBT to practitioners. They review barriers encountered by those who have

implemented the model and present strategies that have been developed to overcome the barriers.

Telch, C.F., Agras, W.S., & Linehan, M.M. (2001). Dialectical behavior therapy for binge eating disorder. *Journal of Consulting and Clinical Psychology*, 69(6):1061-5. This study evaluated the use of dialectical behavior therapy (DBT) adapted for binge eating disorder (BED). Women with BED (N = 44) were randomly assigned to group DBT or to a wait-list control condition and were administered the Eating Disorder Examination in addition to measures of weight, mood, and affect regulation at baseline and posttreatment. Treated women evidenced significant improvement on measures of binge eating and eating pathology compared with controls, and 89% of the women receiving DBT had stopped binge eating by the end of treatment. Abstinence rates were reduced to 56% at the 6-month follow-up. Overall, the findings on the measures of weight, mood, and affect regulation were not significant. These results support further research into DBT as a treatment for BED.

Trupin, E.W., Stewart, D.G., Beech, B., & Boesky, L.M. (2002). Effectiveness of a dialectical behavior therapy program for incarcerated female juvenile delinquents. *Child and Adolescent Mental Health*, 7, 121-127.

van den Bosch, L.M., Verheul, R., Schippers, G.M., & van den Brink, W. (2002). Dialectical Behavior Therapy of borderline patients with and without substance use problems. Implementation and long-term effects. *Addictive Behaviors*, 27(6):911-923. **OBJECTIVE:** The aim of this article is to examine whether standard Dialectical Behavior Therapy (DBT) (1) can be successfully implemented in a mixed population of borderline patients with or without comorbid substance abuse (SA), (2) is equally efficacious in reducing borderline symptomatology among those with and those without comorbid SA, and (3) is efficacious in reducing the severity of the substance use problems. **METHOD:** The implementation of DBT is examined qualitatively. The impact of comorbid SA on its efficacy, as well as on its efficacy in terms of reducing SA, is investigated in a randomized clinical trial comparing DBT with treatment-as-usual (TAU) in 58 female borderline patients with (n = 31) and without (n = 27) SA. **RESULTS:** Standard DBT can be applied in a group of borderline patients with and without comorbid SA. Major implementation problems did not occur. DBT resulted in greater reductions of severe borderline symptoms than TAU, and this effect was not modified by the presence of comorbid SA. Standard DBT, as it was delivered in our study, however, had no effect on SA problems. **CONCLUSIONS:** Standard DBT can be effectively applied with borderline patients with comorbid SA problems, as well as those without. Standard DBT, however, is not more efficacious than TAU in reducing substance use problems. We propose that, rather than developing separate treatment programs for dual diagnosis patients, DBT should be "multitargeted." This means that therapists ought to be trained in addressing a range of severe manifestations of personality pathology in the impulse control spectrum, including suicidal and self-damaging behaviors, binge eating, and SA.

Verheul, R., van den Bosch, L.M., Koeter, M.W., De Ridder, M.A., Stijnen, T., van den Brink, W. (2003). Dialectical behaviour therapy for women with borderline personality disorder: 12-month, randomised clinical trial in The Netherlands. *British Journal of Psychiatry*, 182:135-

140. **BACKGROUND:** Dialectical behaviour therapy (DBT) is widely considered to be a promising treatment for borderline personality disorder (BPD). However, the evidence for its efficacy published thus far should be regarded as preliminary. **AIMS:** To compare the effectiveness of DBT with treatment as usual for patients with BPD and to examine the impact of baseline severity on effectiveness. **METHOD:** Fifty-eight women with BPD were randomly assigned to either 12 months of DBT or usual treatment in a randomised controlled study. Participants were recruited through clinical referrals from both addiction treatment and psychiatric services. Outcome measures included treatment retention and the course of suicidal, self-mutilating and self-damaging impulsive behaviours. **RESULTS:** Dialectical behaviour therapy resulted in better retention rates and greater reductions of self-mutilating and self-damaging impulsive behaviours compared with usual treatment, especially among those with a history of frequent self-mutilation. **CONCLUSIONS:** Dialectical behaviour therapy is superior to usual treatment in reducing high-risk behaviours in patients with BPD.

Wiser, S., & Telch, C.F. (1999). Dialectical behavior therapy for binge-eating disorder. *Journal of Clinical Psychology*, 55(6):755-768. Binge-eating episodes have alternately been described as stemming from strict dieting behaviors driven by overvalued ideas of weight and shape, or as arising from problematic interpersonal experiences. A third way of conceptualizing an eating binge is as a maladaptive emotion-regulation strategy, suggesting that facilitating more adaptive and effective affect regulation capacities may be a useful treatment. Dialectical Behavior Therapy (DBT), a treatment aimed at increasing emotion regulation skill, is currently being adapted for use with a binge-eating disorder population. Assumptions underlying the treatment, methods in treatment delivery, and goals of the treatment package are discussed. A pilot study currently underway of group DBT therapy for individuals with Binge-Eating Disorder is described.

Woodberry KA, Miller AL, Glinski J, Indik J, Mitchell AG. (2002). Family therapy and dialectical behavior therapy with adolescents: Part II: A theoretical review. *American Journal of Psychotherapy*, 56(4):585-602. Dialectical Behavior Therapy (DBT) is based on a transactional model of the etiology of borderline personality disorder (BPD). It assumes that the associated emotional dysregulation is not simply biological or family induced but the result of a dynamic interaction between the biology and characteristics of an individual with the individual's social environment. This paper discusses the theoretical issues and empirical research relating to a synthesis of family therapy and DBT with adolescents. A review of the literature identifies support for a greater understanding and inclusion of families in treatment, attention to relational aspects of affect, and a dialectical framework for synthesizing individual-oriented and systemic-oriented theories and practice. Some implications for the development of a DBT family therapy model are discussed.

Appendix B.

Measures

Staff Survey

Client Survey

Staff Survey

Agency Name _____

Job Position: _____

How long have you been at this agency?

If you were at this agency before DBT was implemented, please answer the following:

What did clients learn while at the agency at that time?

How did clients learn to not use alcohol and drugs?

How effective was the treatment?

How did you feel about your job?

Any other comments about working at the agency at that time?

At the current time,

What do clients learn while at the agency?

How do clients learn to not use alcohol and drugs?

How effective is the treatment?

How did you feel about your job?

I missed _____ days of work in the past year (do not include vacation)

Any other comments about working at your agency now?

The following questions should be answered 1- 5.

- 1 – disagree strongly
- 2 – disagree somewhat
- 3 – neutral
- 4 – agree somewhat
- 5 – agree strongly

Communication is good within the agency.

I sometimes feel my job is meaningless.

I enjoy working here.

If I had a friend looking for a job, I would recommend this agency as a place to work.

I feel a sense of pride in doing my job.

I have a lot of control over how I do my job.

I feel respected for the work I do.

Clients who come to our agency are treated fairly.

Clients at our agency get the best possible treatment.

The work I do here really makes a difference.

I am effective at my job.

The level of absenteeism and tardiness is:

Very Low Somewhat Low Average Somewhat High Very High

Turnover at the agency is:

Very Low Somewhat Low Average Somewhat High Very High

Client Survey

Today's Date _____

Have you been in any treatment program for alcohol or drugs before this time?

If you were ever at another program, what, if anything, did you learn at that program that you still use?

Tell me about anything you learned there that helps you to not use alcohol or drugs?

How long have you been at this program?

What, if anything, have you learned at this program that you think you will use once you leave the program?

How does that help you?