**DBT international information to advance the credibility and value of full standard adherent DBT**

Roy Krawitz 11 June 2012

**Main abbreviations:**

Borderline personality disorder: BPD, Dialectical behavior therapy: DBT, Randomised controlled trial: RCT (Gold-standard research)

**BPD – size of the problem**

* BPD has 1st (females) and 2nd highest (males) suicide rates of all mental disorders studied (Qin, 2011)
* 33% of suicides shown on psychological post-mortem to have met criteria for BPD (Runeson, 1996)
* 10% suicide rate (roughly equal to that of schizophrenia, bipolar disorder) (Gunderson, 2005)
* Mortality due to all causes associated with BPD significantly greater than that of major depressive disorder bipolar disorder, drug abuse and dependence, or schizophrenia (Eaton, 2008)
* 20% of mental health inpatients (Swartz, 1990)
* 10% of community mental health patients (Swartz, 1990)
* Community epidemiology study (35,000 people) – BPD community prevalence of 5.7% (Grant, 2006)
* Previous unpublished study of the 10 highest service use (in dollar terms) clients in a New Zealand District Health Board demonstrated majority having BPD (Drysdale, 1999)

**ADHERENT DBT – an effective solution**

**Research of DBT’s clinical effectiveness**

* DBT is the BPD treatment model for BPD with the largest number of evidence-based published research of effectiveness (8 RCTs vs 2 RCTs of next cab off the rank)
* The Am. Psychol. Assn. Society of Clinical Psychology (APS) considers DBT the only well-established empirically supported treatment for BPD that has strong research support (APA Division 12, 2011).
* The APS similarly considers DBT to be the only current treatment for BPD that has level I (highest level) evidence for its use.
* DBT is currently the only therapy listed as an evidence-based practice for BPD in the U.S. Substance Abuse and Mental Health Service Administration’s (SAMHSA) National Registry of Evidence-Based Programs and Practices (SAMHSA, 2012).
* The U.K. NICE guidelines recognises that, more than any other therapy, there is some evidence that DBT is effective in reducing suicide attempts and self-harm, anger, aggression and depression in patients with BPD (NICE, 2009).
* DBT is the only psychosocial treatment for BPD whose use the NICE guidelines specifically recommend
* Growing research evidence of effectiveness for a wide range of other complex difficult to treat conditions including RCTs for substance abuse (4), eating disorder (2 RCTs), treatment resistant depression (1 RCT), elderly depressed (2 RCTs) suicidal adolescents (1 RCT), problem gambling (1 RCT); and less rigorous research of effectiveness for anorexia, violence, families, couples, corrections, ADHD, bipolar disorder in adolescents, and oppositional defiant disorder.

**Economic impact of DBT internationally**

**COST OF DBT IS APPROXIMATELY 50% LOWER THAN TREATMENT AS USUAL**

1. Routine Australian (Qld) public mental health service ***saved A$5,927/patient over 6 months*** of DBT vs TAU (Total cost A$12,196 vs A$18,123) (Paisieczny, 2011)
2. Another routine Australian (Qld) public mental health service **DBT saved 4.36 hospital days/client = A$4,500 over 6 months** of DBTvs TAU –Prendergast - 2007
3. Washington State Institute for Public Policy report (2004) that a Washington State juvenile offender institution DBT program achieved a ***US$38.05 financial benefit for every dollar spent*** on the DBT program and ***saved nett US$31,243/client*** after costs of DBT subtracted (2003 US$ figures)
4. Swedish (Perseius, 2004) study showed a saving of ***US$17,000 (320,000SEK vs 210SEK) comparing costs in year before DBT vs year of DBT*** (6-18 month period of DBT). Comparing the month before DBT treatment with the 18th month of DBT treatment demonstrated a US$6,000/patient saving (US$8,000 vs US$2,000) (1SEK =.1494 US$). See attachment.
5. “DBT ***saves US$9,000 per patient during the first year of treatment***” (Linehan & Heard [1999] published economic data on Linehan’s 1991 seminal study). That is a US$9,000 investment resulted in savings of US$9,000. Brazier (2006) in a 157 page systematic review report, “This was a good-quality study that scored highly on the *BMJ* checklist for economic evaluations”.
6. **DBT saved US$26,000/patient in year after DBT** at the Mental Health Center of Greater Manchester in New Hampshire (published data; American Psychiatric Association, 1998). Reductions of 77 percent in hospitalization days, 76 percent in partial hospitalization days, 56 percent in crisis beds, and 80 percent in emergency room contacts. Total service costs in the year of the program decreased from US$46,000 to $20,000/patient.
7. In 1997, Gabbard et al reviewed the economic impact of treatment and report on Heard’s finding of DBT saving approximately US$10,000/patient/year
   * Parsimonious to expect cost savings to increase over subsequent years as positive client outcomes mean that health cost savings remain whilst treatment costs of providing DBT decrease or stop.
   * These figures represent a phenomenal ***return on the financial investment*** and an investment that one would imagine every organizational accountant would be vigorously championing for, whatever the financial state of the organisation.
   * If reader is interested in the detail; for most precise systematic scientific review, see Brazier et al’s 157 page systematic review document

**Research of the importance of DBT adherence to clinical and financial outcomes**

* Research shows that treatment model fidelity was related to +ve client outcomes for the following treatments (CBT for depression, Assertive Community Treatment, MST, TFCBT, FFT [poor adherence made outcomes worse]
* Specific to BPD, treatment adherence associated with improved client outcomes for MACT (Davidson, 2004), dynamic deconstructive therapy (Goldman, 2009) and DBT (Linehan, 1991; Linehan, 1999).
* Research shows that the number of clinicians who state that they are practicing an evidence-based treatment who are actually practicing an evidence-based treatment is low
* The Substance abuse and mental health administration (SAMSHA) directed by US Congress in 2011 reported to the US House of Representatives of widespread concerns of clinicians purporting to be offering DBT that lacked adherence, achieving poorer outcomes than that attained in the research
* Several published and unpublished studies (used as part of research trials) demonstrate that DBT adhering therapists have better client outcomes than non-adhering DBT therapists
  + Linehan (1999) - Clients of adherent therapists had statistically significantly more “clean” urinalyses in treatment year (p>.038) and at 12-month post treatment assessment (p>.018). This statistical significance existed despite the small numbers (n=4 vs n=3)
  + Linehan’s 1993 and 2012 (Bedics & Linehan) studies showed that therapist adherence (non-pejorative conceptualization of client) and dialectical balance of acceptance and change) was associated with reduced self-harming in the week following that adherent session
  + Bedics & Linehan (2012) showed that other therapist DBT adherence behaviours to be correlated with outcome
* Fruzzetti (in press), research demonstrating DBT validation interventions of V4, V5 and invalidating the invalid (blocking ineffective client behaviour) to be probably related to outcome
* Research shows that novelty is correlated with learning. Clinical implications for DBT is that adherent DBT deliberately promotes novelty for this precise purpose by use of specific therapist interventions
* Education research shows that training accounts for 5% of new change behaviours with 95% of new change behaviours being due to practice of new behaviours and close, quick accurate feedback. The clinical implications are that high quality DBT supervision and consultation is critical to outcomes
* Extensive gold standard research of DBT’s effectiveness in working with complex highly suicidal people is based on adherent DBT, so if we want to provide the treatment with reference to the evidence base then that's what we have to do. Else we are providing an untested treatment for suicidal people ... I wouldn't want to defend that in court

**DBT’s likely impact on staff, suicide and complaints**

* + Evidence-based practice for parenting vs non-evidence based case management showed lower staff turnover and burnout (Aarons, 2009)
  + Likely improvements in staff morale, staff retention, staff recruitment
  + Likely decrease of suicides
  + Likely decrease in complaints from clients, family/friends, and staff