

NATIONAL DBT PROJECT IRELAND

REPORT

PLANNING, IMPLEMENTATION AND EVALUATION
OUTCOMES FOR DIALECTICAL BEHAVIOUR THERAPY
IN THE IRISH COMMUNITY MENTAL HEALTH SERVICE

2013
2018



National Office for
Suicide Prevention



“Responding to a suicide attempt by insisting that it must stop, and devoting the full resources of therapy to preventing it, is a communication with compassion and care at its very core.”

Professor Marsha M. Linehan

“I can now call upon new skills that will enable me to look upon tomorrow as the “first day of the rest of my life.”

DBT Programme participant

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Glossary of Abbreviations

DBT	Dialectical Behaviour Therapy
BPD	Borderline Personality Disorder
EUPD	Emotionally Unstable Personality Disorder
HSE	Health Service Executive
NOSP	National Office for Suicide Prevention
NSRF	National Suicide Research Foundation
AMHS	Adult Mental Health Services
CAMHS	Child and Adolescent Mental Health Services
HeBE	Health Boards Executive
DSM-5	The Diagnostic and Statistical Manual of Mental Disorders (5th ed)
ICD-10	International Classification of Diseases (10th edition)
APA	American Psychiatric Association
NICE	National Institute for Health and Care Excellence
U&ME	Understanding and Managing Emotions
U&ME-A	Understanding and Managing Emotions - Addiction
DBT STEPS-A	Skills Training for Emotional Problem Solving for Adolescents
DBT-ST	DBT Skills Training
FC	Family Connections
CC	Clinician Connections

A Message from the National Office for Suicide Prevention

JOHN MEEHAN



The vision of *Connecting for Life, Ireland's National Strategy to Reduce Suicide 2015-2020* is an Ireland where fewer lives are lost through suicide, and where communities and individuals are empowered to improve their mental health and wellbeing. The HSE's National Office for Suicide Prevention (NOSP) has a pivotal role to play in driving the strategy; supporting, informing and monitoring its implementation in partnership with many different lead agencies.

In Ireland, effective partnership working remains essential to suicide prevention work and is fundamental to the successful implementation of our national strategy.

Goal 4 of *Connecting for Life* is to enhance accessibility, consistency and care pathways of services for people vulnerable to suicidal behaviour. In this context, we are pleased to have supported the National DBT Project in their work and commend them in producing this report.

The report clearly outlines key evaluation results from a range of programmes and projects, and considers the implications for those who avail of them and for health services and providers. It will add to our evidence base for suicide prevention, suicidal behaviour, self-harm and death by suicide. The learning will inform future planning in this area and assist in our ongoing efforts to improve the uniformity, effectiveness and timeliness of therapies and interventions across many health settings.

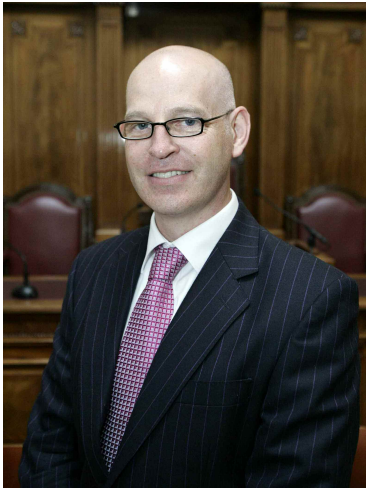
We know that suicide prevention is best achieved when individuals, families, health providers and community organisations, government departments and communities work collaboratively. We all have a role to play in supporting those vulnerable to suicide or self-harm. The NOSP is confident that the innovative work presented by the National DBT Project here, will further strengthen the growing infrastructure of evidenced suicide prevention approaches and supports.



**John Meehan, HSE Assistant National Director
Head of National Office for Suicide Prevention
and Lead for Community Strategy & Planning**

Executive Summary

DANIEL FLYNN



It's a great privilege to be able to present an overview of the work to date on the National DBT Project, Ireland.

Reducing suicide and self-harm

To put the project in context, in 2003 a governmental strategy for action on suicide was approved. This resulted in the establishment of the National Office for Suicide Prevention (NOSP) and ultimately publication of *Reach Out: National Strategy for Action on Suicide Prevention 2005-2014*. The strategy advocated for a better understanding of mental health and more support for individuals experiencing mental health difficulties, with a particular focus on reducing suicide and self-harm in Ireland. In 2006, *A Vision for Change: Report of the Expert Group on Mental Health Policy*, highlighted the need for evidence-based treatment for high risk individuals, while the aims of *Reach Out* were advanced with the publication of its succession strategy, *Connecting for Life 2015-2020*, in 2015.

Focus on BPD Population

An identified population with a high rate of self-harm and suicidal behaviours are individuals who meet criteria for a diagnosis of Borderline

CREATING A LIFE WORTH LIVING

Personality Disorder (BPD). The inability to regulate emotion and mood, instability in interpersonal relationships, hypersensitivity, aggression and anxiety are all characteristics of BPD. These difficulties not only impact on the person experiencing these symptoms, but also on their family members/ significant others.

DBT - A growing evidence base

During the 1990s and 2000s, a growing evidence-base has shown that dialectical behaviour therapy (DBT) is an effective treatment for BPD. Rather than being labelled as a suicide/self-harm prevention programme, DBT focuses on the philosophy of 'creating a life worth living.' It provides individuals who experience chronic emotional dysregulation an opportunity to learn skills and respond to difficulties in a more effective way.

From pilot programme to national roll-out

Following the successful implementation of DBT in Cork city and county, a funding proposal was submitted to the NOSP to coordinate DBT training in Ireland at a national level. The proposal was successful and funding was granted to train 16 DBT teams across Ireland over a two year period, which included an evaluation of this coordinated implementation. The *National DBT Project, Ireland* was established in June 2013.

Across a two year period, 124 therapists across 16 teams in both adult and child and adolescent mental health services completed training and

implemented DBT in their services. A further seven teams comprising over 40 therapists completed DBT training in 2015/2016 when funding for the project was extended beyond the initial two year period.

The standard 12 month DBT programme and DBT for adolescents (an adaptation specifically tailored for adolescents and their parent/guardians) has been established in services across Ireland resulting in 54% national coverage as of July 2018.

DBT adaptations for other populations

In addition, several allied DBT programmes commenced at pilot sites in Cork, including: Understanding and Managing Emotions (skills only programme), Understanding and Managing Emotions - Addiction, Family Connections for family members, DBT STEPS-A secondary school programme and other adaptations as deemed appropriate for various client groups including inpatients. Such adaptations have added value for populations beyond those initially targeted by the DBT programme.

National DBT Project Ireland - Research results

Results of analyses completed on data collected for this national evaluation show that DBT is an effective treatment for individuals with BPD attending community mental health services in Ireland. Significant reductions have been observed in self-harm and acute inpatient admissions for DBT participants. Gains have been maintained or further improved at follow-up.

Comparable results have also been found for emotionally dysregulated adolescents. Significant improvements in psychological constructs have also been reported for both adults and adolescents.

Results to date on DBT informed programmes found similarly beneficial results. Family Connections (a DBT-informed support programme for family members) resulted in significant reductions in burden, grief and depression. Likewise, DBT STEPS-A, a skills based programme delivered in secondary schools, found positive effects in the young people who trialled the programme leading to reductions in depression anxiety and social stress.

While outcomes for clients are important, they are underpinned by the feasibility and effective delivery of interventions by clinicians. Analysis of feedback from therapists delivering the DBT programme reports benefits of having training and supervision in an effective evidence-based model to better meet service user specific mental health needs.

Economic benefit

Public mental health services focus on providing high quality evidence based interventions that are cost effective. An economic evaluation conducted as part of the project found DBT to be cost effective when compared to treatment-as-usual for managing BPD for the duration of the programme (one year) and one year follow-up. The probability of DBT being cost-effective after one year is 72%. DBT continues to be cost effective at 3, 5 and 10 years. The probability of DBT being cost-effective at 10 years is 79%

We would like to thank the NOSP and the HSE Mental Health Services for their support in the funding, training and evaluation of DBT in Ireland.



**Daniel Flynn, Principal Psychology Manager,
Cork Kerry Community Health Care,
Clinical Lead National DBT Project.**

“ Everything about DBT has helped me
build a life worth living. It was the best
thing that ever happened to me.
It saved my life. ”

DBT programme participant

“ The skills I have learned in DBT will be with me forever to help me get through life's stressful events. I am so grateful to have completed this program. It has saved my life. I have learned that I have BPD and I will never be cured but my life is so much better now with the skills that I've learned. I have built a life worth living. DBT therapists have greatly helped me in learning the skills in a way that is easily understood. This program needs to continue to help others who are in my situation.

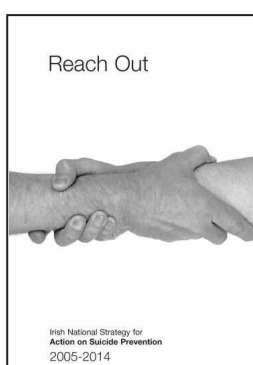
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DBT programme participant

CHAPTER ONE

Introduction

1.1. CONTEXT



Self-harm and suicidal behaviours were first identified as key target areas warranting specialist intervention in Ireland as part of *Reach Out: National Strategy for Action on Suicide Prevention 2005-2014* [1]. Prior to this, epidemiological information on self-harm and

suicide in Ireland was limited. However, by the mid 2000s a picture emerged of the reality of self-harm and suicide in Ireland, informed both by official reporting of suicide following its decriminalisation in Ireland in 1993, and data from the National Self-Harm Registry, Ireland, which was established in 2001.

For clinicians working in the health service, epidemiologically robust evidence of the magnitude of the problem was welcomed and further strengthened their calls for a concerted approach to the growing problem of suicide and self-harm in the Irish population.

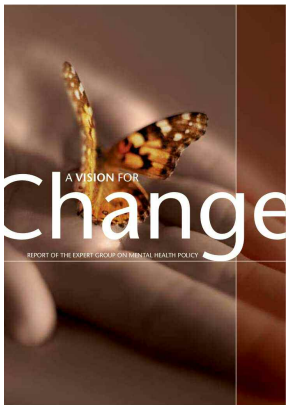
1.2 NATIONAL STRATEGY FOR ACTION ON SUICIDE PREVENTION

Reach Out was approved by the Health Boards Executive (HeBE) in February 2003 in partnership with the National Suicide Review Group and the Department of Health and Children. *Reach Out* outlined a vision and a series of guiding principles,

the aims of which were to navigate a path towards a better understanding of mental health and more support for those experiencing mental illness. Suicide and self-harm were ear-marked for special consideration, particularly within the following strategic vision areas:

- The mental health and well-being of the whole population is valued
- Mental illness is more widely recognised and understood and those experiencing difficulties are offered the most effective and timely support possible
- The abuse of alcohol and other drugs is reduced considerably
- Everyone who has engaged in deliberate self-harm is offered the most effective and timely support possible
- Those affected by a suicide death or deliberate self-harm receive the most caring and helpful response possible.

Due to the multiplicity of factors that can contribute to self harming behaviours and completed suicides [2,3], there is unfortunately no 'one size fits all' solution and broad spectrum evidence-based treatments are difficult to achieve [4,5]. Thus, it is often pragmatic as a first line of defence to deal with what is known and to target conditions and high risk populations with a higher propensity



towards self-harming and suicidal behaviours. One such vulnerable population identified has been those with Borderline Personality Disorder (BPD).

Following *Reach Out*, the national mental health policy framework outlined in *A Vision for Change: Report of the Expert Group on Mental Health Policy* in 2006 recommended that the needs of individuals with BPD should be recognised as a legitimate responsibility of the mental health service.

It was outlined that specialised evidence-based treatment should be developed in each catchment area of the HSE and provided to these individuals (Recommendations 15.8.1 and 15.8.2). Dialectical Behaviour Therapy (DBT) was listed as an example of one effective treatment approach [6].

Timeline

For the purposes of this report, the policies and guidelines referred to date from when the project began in early 2013. The results outlined in this report are based on a representative sample of participants who completed treatment by the end of 2015.

In 2015, *Connecting for Life, 2015-2020* was published and this has informed the subsequent and ongoing development of the National DBT Project. While *Connecting for Life, 2015-2020* was not in place for the formative years of this project, it can be seen in Figure 1.1 that the National DBT Project is very much in line with the vision, goals, outcomes and implementation strategy of *Connecting for Life, 2015-2020*.



Figure 1.1 Connecting for Life Strategy 2015-2020

1.3 BORDERLINE PERSONALITY DISORDER

1.3.1 The Borderline Personality Disorder Profile

The term 'borderline personality' was proposed in the United States by Adolph Stern in 1938 who observed patients with symptoms that bordered on other conditions without fitting into any one pattern of illness [7].

BPD as a diagnosis entered the American Psychiatric Association's DSM-III in 1980 and in 1992 was adapted for the World Health Organisation's 10th revision of the International Statistical Classification of Diseases and Related Health Problems [8,9]

BPD is now defined as per the Diagnostic and Statistical Manual of Mental Disorders (DSM-5)

code 301.83 (F60.3), or as Emotionally Unstable Personality Disorder (EUPD), as per the International Classification of Disease (ICD) 10 code 2016/17 ICD-10-CM F60.3/F60.31. [10–12]

Terminology

In Ireland, individuals referred to Adult Mental Health Services (AMHS) meeting either of the above diagnostic criteria are treated in the same way and for the purposes of this report the term BPD will be used to refer to both BPD and EUPD patient profiles.

It should be recognised that service users, their families and indeed some clinicians, can find labels stigmatising and this is not the intention of this report. Throughout this report BPD is used as an umbrella term for individuals who experience significant emotion dysregulation. The use of an umbrella term also facilitates the comparability of research internationally.

Cause and presentation

The causes of BPD are unclear, however it is thought that a combination of biological and environmental factors may be involved. According to Marsha Linehan's Biosocial Theory, BPD is primarily a disorder of emotion dysregulation and occurs as a result of transactions between individuals with biological vulnerabilities and specific environmental influences [13]. More recent research links BPD with prenatal adversity [14] and childhood trauma [15], while high heritability levels of 65%-75% along with findings that confirm dysfunction involving both temporolimbic and frontomedial structures and their connectivity attest to the physiological component [15].

BPD is characterised by disturbances in emotion

regulation and processing, instability in interpersonal relationships, hypersensitivity, aggression, anxiety, impulsive behaviour, repeated and sudden shifts in mood and self-harming and suicidal behaviours [16]. People with BPD also tend to have high rates of co-occurring mental disorders, such as mood disorders, anxiety disorders, eating disorders, alcoholism and substance abuse [10,17]. The profound and severe impact on psychosocial functioning not only affects those with BPD, but also their carers and family networks.

A Vision for Change outlines that people with this disorder can present with histories of abusive relationships, repeated self-harming behaviours and emotional instability [6].

Lifetime rates of approximately 69 - 80% for acts of self-injury, up to 75% for suicide attempts [15] and 10% for completed suicide [16] demonstrate the impact of this mental health difficulty, not just on individuals who suffer with it, but also on the family members and significant others who care for them. Given the complexity of their presentations, individuals with BPD can present a huge challenge for mental health services.

1.3.2 Borderline Personality Disorder in Ireland

It is difficult to give a true estimate of the number of people with BPD in Ireland. However, population and clinical percentage estimates, in combination with Irish census data, can shed light on likely population estimates.

Peer reviewed estimates of the prevalence of BPD in the general adult population are between 0.7% and 1% [20–24]. Applying this estimate to the 2016 Irish adult population of 2,977,952 million people aged 18 - 65 years [25] indicates that BPD may be present

in 20,845 (0.7%) to 29,779 (1%) people in Ireland. This however does not necessarily provide a clear picture of those actually present in the health system as not all those experiencing mental illness will necessarily be in attendance at mental health services. Further, as children and adolescents under 18 are not given a diagnostic label of BPD, they cannot be accounted for in population estimates even though it is very clear at clinician level that there are many children in the under 18 category who need intervention.

Estimates of BPD prevalence rates in secondary level community care settings in the Republic of Ireland range from 11-20% of mental health service users [6]. These estimates are similar to those recorded in other countries including the United Kingdom [26], North America [27] and other parts of Europe, e.g. Denmark; [28].

A model developed by Goldberg and Huxley [29–31] (Fig 1.2) on the epidemiology of mental disorders estimates 2.5% of the population to be community mental health service users, an estimate which was later corroborated in a Scottish adult

population by O’Sullivan *et al.* [32]. A 2.5% figure based on the 2016 over 18 -65 population comes to 74,448 people, who, according to the Goldberg model, should be within the AMHS remit.

Applying the above outlined 11%-20% estimate to the Goldberg and Huxley 2.5% population estimate of 74,448 suggests that between 8,189 and 14,889 AMHS users may have BPD.

1.4 COST OF BORDERLINE PERSONALITY DISORDER

Due to the chronic nature of BPD, individuals with BPD tend to use health care resources more extensively than patients with other personality disorders or with major depression [33,34]. This is evidenced by more frequent and continued use of outpatient and inpatient treatment and high use of prescribed psychotropic medication.

As part of the National DBT Project Ireland, a prevalence-based micro-costing study was undertaken to determine the costs of BPD to the Irish health service. Details of this analysis are presented in Chapter 9.

1.5 TREATMENT OPTIONS FOR BORDERLINE PERSONALITY DISORDER

The treatment pathway recommended by both the National Institute of Clinical Excellence (NICE) and the American Psychiatric Association (APA) is psychotherapy, complemented by symptom-targeted pharmacotherapy, with the caveat that any pharmacotherapy used should not be seen as specifically for BPD or for symptoms associated with this disorder. NICE guidelines also recommend that inpatient stays are no longer than seventy-two hours at any

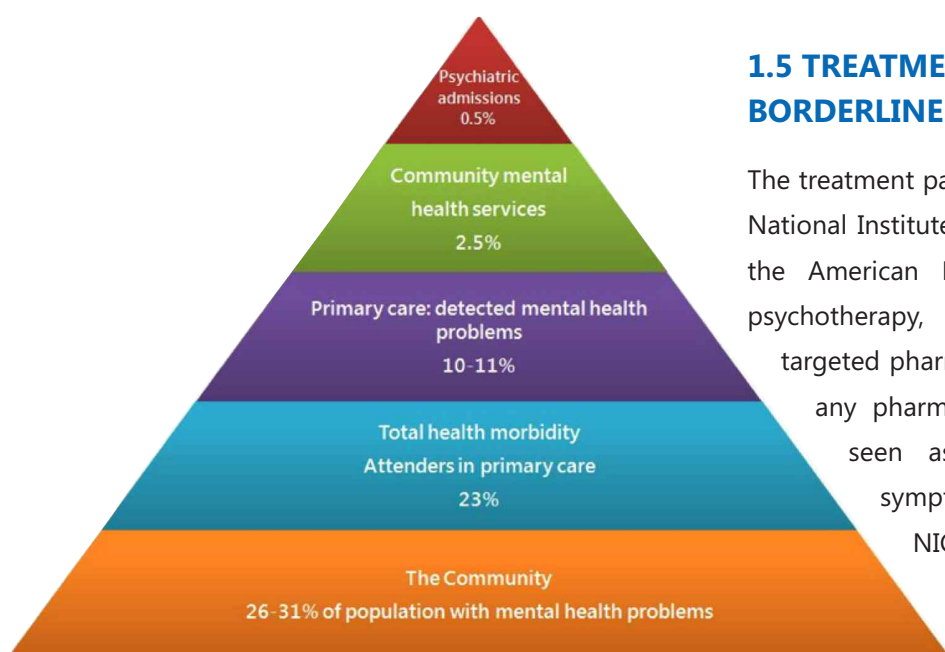


Figure 1.2 Goldberg & Huxley model on the epidemiology of mental disorders [31]



one time [35,36]. Further, it is advocated that any psychotherapeutic approaches used should be of long duration, use a multidisciplinary care structure and, where possible, enlist family/carer involvement.

To date, the treatment with the largest evidence base for treating BPD is DBT [37]. DBT is typically a 12 month intensive behavioural change programme, which can be run independent of, or in combination with, pharmacotherapy.

Other treatments, such as: Mentalization Based Therapy [38], Schema Therapy [39], Systems Training for Emotional Predictability and Problem Solving (STEPPS) [40] and Transference-focused Psychotherapy [41] are now also being considered and research is underway as to their efficacy with respect to BPD patients. Further research is required of such therapies in comparison with and in conjunction with DBT and in community settings.

1.6 DIALECTICAL BEHAVIOUR THERAPY

1.6.1 The Standard Programme

DBT is a modified form of behaviour therapy that also draws on some of the principles of mindfulness and acceptance based practices. It is also cognisant of biosocial theory which recognizes BPD as a disorder of emotion regulation that emerges from a combination of biological and environmental factors [42].

The treatment developer, Marsha Linehan, indicates that the core aim of DBT is to give the BPD patient the skills to build 'a life worth living'; to deal with life as it really is by learning to accept reality in a mindful way, improve interpersonal skills and learn to identify and regulate emotion [13]. Thus, gradual change can become possible within a realistic and achievable framework, while validating and accepting present experience as well as understanding and awareness of what can and cannot be changed. The dialectic then is between the strategies of acceptance and change.

The same radical acceptance and willingness to embrace the transactional nature of the relationship is expected of the therapist who will have a mental health qualification and must undertake specialist training to deliver the treatment.

The unique feature of DBT is that it was developed expressly to deal with emotional dysregulation, including BPD, recognising not only the difficult nature of this illness for clients, but also the difficult historical client/therapist relationships that sprang from the problematic management of such a complex and challenging disorder [43].

There are four stages of DBT [37].

The **first stage** offers standard DBT to develop behavioural control, and reduce, and ultimately eliminate, life threatening and treatment interfering behaviours.

Standard DBT is typically completed within 12-months and is delivered by a multidisciplinary health care team. Team members can be drawn from psychiatry, psychology, nursing, social work, occupational therapy and various allied mental health disciplines. Treatment comprises weekly individual one hour sessions, two and a half hours

group skills training, phone coaching as required and, for the clinicians on the DBT team, a one and a half hour weekly team consult meeting. Group skills training modules are delivered in blocks of three eight-week cycles and cover: distress tolerance, emotion regulation, interpersonal effectiveness and mindfulness. The three cycles are delivered over a 24-week period and are then repeated. Mindfulness is taught in the first two weeks of each cycle, followed by six weeks each of distress tolerance, emotion regulation and interpersonal effectiveness. In 2015, the skills training modules were revised to allow seven weeks for emotion regulation [44].

The **second stage** of DBT builds on the standard programme and increases the appropriate experiencing of emotions that do not cause emotional instability but which do cause quiet desperation.

The **third stage** of DBT focuses on “ordinary” levels of emotions, improved relationships and increased self-esteem.

The **fourth stage** of DBT moves away from problem solving and towards an increased sense of connectedness.

The third and fourth stages of DBT are not typically offered as part of a public health service offering [13,45].

DBT is an evidence based treatment, with more than a dozen controlled trials to date which have investigated the efficacy of the intervention [18,46–48]. DBT has been recommended by the American Psychiatric Association [35] and more recently by the NHS National Institute for Health and Clinical Excellence [36] as an evidence-based treatment option for patients with BPD and co-morbid presentations. See Chapter 2 for a more extensive review of research on DBT to date.

1.6.2 Early Adoption of DBT in Ireland

A number of DBT training events were held in Ireland throughout the early 2000s. Clinicians working in community mental health services with BPD clients were interested in DBT as an evidence-based model that would potentially meet the needs of this client population. However, opportunities to attend these training events were localised and there was no mechanism in place for services or teams to apply to avail of training opportunities in a coordinated manner at a national level. Providing an evidence-based, but resource intensive, treatment model, which required a multidisciplinary team approach was welcomed in theory at this time but without a national mandate was difficult to implement in a publicly funded health system.

1.6.3 Cork Pilot Programme

In 2010, in response to the growing incidence of self-harm in the Cork region [49], clinicians from the North Lee Adult Mental Health Service in Cork self-funded to attend DBT training provided by a licensed provider in the U.K. The multidisciplinary team members were drawn from Psychology, Nursing, Psychiatry and Art Therapy staff from the Community Mental Health Team. While additional funding was not available at this time, local management did release DBT team members for 1.5 days per week to implement DBT upon completion of training. Programme delivery began in September 2010.

As part of the programme it was decided to evaluate the effectiveness of DBT in a community mental health setting and so a detailed study protocol was proposed. The results of this programme evaluation are reported in Chapter 4.

1.7 THE NATIONAL DBT PROJECT

1.7.1 Establishing the National DBT Project Ireland

In time, as demand for DBT spread throughout Ireland, the Cork North Lee DBT team leader proposed that implementation of DBT programmes could be expanded to national level.

By championing this approach, the National DBT Project Ireland was established in 2013 in the Republic of Ireland. As part of this project, the Cork pilot study protocol was expanded to allow for an effectiveness study at national level.

For this initial roll out, the National Office for Suicide Prevention (NOSP) funded DBT team training nationwide. The National DBT Project Office, based in Cork, was established to manage and coordinate training and evaluation. A research team responsible for evaluating the national project is also based in the Cork office.

1.7.2 Aims and Objectives of the National DBT Project

The aims of the project were twofold: to implement DBT in Community Mental Health Services across Ireland and to evaluate the effectiveness and service implications of this coordinated implementation of DBT at a national level.

The main objective was to train teams in an evidence-based intervention for individuals with BPD so as to offer service users a treatment to improve quality of life by increasing skills and coping abilities and reducing self harming and life threatening behaviours.

Secondary objectives were to evaluate the real world effectiveness of DBT in a community mental health setting, both in terms of outcomes and in terms of costs and benefits to the public health system.

1.8 REPORT STRUCTURE

The implementation and evaluation of DBT in Ireland, through the National DBT Project, is set out in this report across the subsequent seven chapters.

Chapter two presents the evidence base to date for DBT in adult and adolescent populations.

Chapter three presents an overview of DBT in the context of the public mental health services in Ireland.

Chapter four outlines the project development process of the National DBT Project in Ireland.

Chapter five outlines the development of the research evaluation protocol for the National DBT Project.

Chapter six presents research results for the AMHS DBT programme participants (2013-2015).

Chapter seven presents research results for the CAMHS DBT programme participants (2013-2015).

Chapter eight presents research results for the participating therapists experience of the DBT programme (2013-2015).

Chapter nine presents research results for economic evaluation and cost effectiveness of the DBT programme.

Chapter ten covers evaluations of adapted DBT for other populations, including: an adapted adolescent DBT schools programme (DBT STEPS-A); Family Connections, a DBT informed support programme for family members of people with BPD, and a third stage post DBT coaching programme.

The Conclusion provides a summary of the clinical and service impact of this programme to date.

“ The desire to commit suicide, however, has at its base a belief that life cannot or will not improve. Although that may be the case in some instances, it is not true in all instances. Death, however, rules out hope in all instances. We do not have any data indicating that people who are dead lead better lives. ”

Marsha M. Linehan

CHAPTER TWO

Existing Research on DBT

Overview: DBT is seen as an evidence based treatment for people with Borderline Personality Disorder. This chapter provides an overview of the research to date on DBT in adult and adolescent populations.

2.1 DBT IN ADULT POPULATIONS

Studies which evaluate the efficacy and effectiveness of DBT have been ongoing since the treatment was first established in the early 1990s. Efficacy studies refer to research trials conducted in controlled settings whereas effectiveness studies report on treatment delivered in more natural environments, for example routine clinical settings (Table 2.1).

2.1.1 Randomised and non-randomised controlled studies

The majority of research on DBT has been undertaken in controlled comparison studies. To date participation in DBT has been found to be associated with reductions in suicidal behaviour, suicidal ideation, BPD symptoms [47,50,51], hopelessness and depression [47,50,52–55]. It has also been associated with improved adjustment and quality of life, as well as reduced health service utilisation, including a reduction in psychiatric inpatient admissions [50–54].

A systematic review of randomised studies where DBT was used with a BPD population have shown

that DBT is significantly better than treatment-as-usual (TAU) with reductions in self-harm, decreases in ineffective expression of anger and improvement in general functioning reported [48,56].

A meta-analysis by Kliem *et al.* [57] of studies comparing DBT to: supportive treatment, transference-focused psychotherapy, community therapy by experts, therapy as usual, comprehensive validation therapy (with and without 12-step therapy) and general psychiatric management for BPD clients in both community and inpatient settings found a moderate effect size in comparison with: TAU, comprehensive validation plus 12-step therapy and expert community therapy. A small effect size was seen when comparing DBT with other BPD specific treatments. However, as the heterogeneity in measures used across studies and patient settings was considerable, the results of this meta-analysis have to be treated with caution.

2.1.2 Real world effectiveness studies

The value of real-world effectiveness research for outpatient community-based treatments cannot be ignored as it informs clinical practice and provides a clearer picture of stumbling blocks and stepping

Table 2.1 Examples of key DBT Efficacy and Effectiveness Studies (References p.79)

YEAR	AUTHOR	POPULATION	FINDINGS
2006	Brassington & Krawitz	10 patients treated in a New Zealand pilot study of Dialectical Behaviour Therapy (DBT) for people with Borderline Personality Disorder (BPD) in a standard New Zealand public mental health service. DURATION: 6-month programme	Results: Statistically significant improvements in the borderline personality subscale ($p < 0.01$) and the anxiety ($p < 0.05$) and depression ($p < 0.001$) subscales. Statistically significant improvement on the Global Severity Index of the SCL-90-R ($p < 0.001$) and on 10 of the 12 SCL-90-R scales ($p < 0.05$ to $p < 0.001$). Hospital bed days used decreased from 0.57 days per patient per month to 0.2 days per patient per month. Conclusions: These preliminary results document the clinical effectiveness of DBT. A DBT service can be successfully implemented within existing public mental health services.
2007	Comptois <i>et al.</i>	Community mental health centre based study of 24 individuals who chronically injure themselves and/or have experienced multiple treatment failures. DURATION: 1 year	Results: After 1 year of DBT treatment, participants showed a significant reduction in the number and severity of self-inflicted injuries, psychiatric-related emergency room visits, psychiatric inpatient admissions and days, and the number of crisis treatment systems engaged. Results are compared to benchmarks from 3 other clinical trials of DBT. Conclusions: While this pre-post comparison has threats to internal validity, it supports the feasibility of DBT when fully implemented in a community mental health clinic.
2007	Prendergast & McCausland	Examined the efficacy of DBT on 11 female BPD clients within a community setting. DURATION: 6-month programme	Results: Frequency of medically severe suicide attempts decreased. In addition, the duration of telephone contact, face-to-face contact and number and duration of hospital admissions decreased during the DBT program. The participants' psychological, social and occupational functioning improved. Of significance, depression levels also decreased on completion of the program. Conclusions: DBT is an effective treatment for parasuicidal behaviour for BPD clients within an Australian community setting and has many clinical benefits. Future studies would benefit from a larger sample and a control group.
2009	Blennerhasset <i>et al.</i>	The development and evaluation of a DBT programme in an Irish community mental health setting for 8 participants who were assessed at baseline and post intervention DURATION: 6-month programme	Results: Outcome data was available for eight subjects. Significant improvement ($p < 0.005$) seen on all CORE subscales. SCL-90-R showed significant improvement ($p < 0.05$) on the global severity index and on the positive symptom distress index. A decrease in self harming behaviour was found. Subjects' inpatient bed days dropped from a mean of 58 in the year pre intervention to a mean of four days in the year post intervention. A novel finding was that 43% of subjects who originally fulfilled criteria for avoidant personality disorder no longer did so post intervention. Conclusions: DBT can be applied in a community mental health setting with benefits similar to more specialist settings. Significant difficulties were encountered in implementing the programme. Clinical implications were that specialist psychotherapy services need to be an integral part of psychiatric services to achieve better outcomes for patients with borderline personality disorder.
2011	Pasieczny & O'Connor	Examined the clinical and cost effectiveness of providing DBT over TAU in a routine Australian public mental health service for 43 adult patients with BPD.	Results: After six months of treatment the DBT group showed significantly greater reductions in suicidal/non-suicidal self-injury, emergency department visits, psychiatric admissions and bed days. Self-report measures were administered to a reduced sample of patients who demonstrated significantly improved depression, anxiety and general symptom severity scores compared to TAU at six months. Average treatment costs were significantly lower for those patients in

			<p>DBT than those receiving TAU. Therapists who received intensive DBT training were shown to produce significantly greater improvements in patients' suicidal and non-suicidal self-injury than therapists who received only 4 day basic training. Further clinical improvements were achieved in patients offered an additional six months of DBT.</p> <p>Conclusions: This study demonstrates that providing DBT to patients within routine public mental health settings can be both clinically effective and cost effective.</p>
2012	Feigenbaum <i>et al.</i>	<p>Evaluated the effectiveness of DBT delivered at a level of training readily achievable in National Health Service care settings.</p> <p>42 individuals with a Cluster B personality disorder. RCT methodology was used to compare DBT to treatment as usual (TAU) in a real world setting.</p> <p>DURATION: 1 year</p>	<p>Results: Both the DBT and TAU groups improved on the range of measures employed. The DBT group showed a slightly greater decrease in CORE-OM risk scores, suicidality, and post-traumatic stress disorder symptom severity. However, the TAU group showed comparable reductions in all measures and a larger decrease in para-suicidal behaviours and risk.</p> <p>Conclusions: DBT may be an effective treatment delivered by community outpatient services for individuals with a Cluster B personality disorder. Further studies are needed to consider the impact of experience and adherence to DBT in improving outcome.</p>
2012	Priebe <i>et al.</i>	<p>Randomized control trial methodology was used to compare DBT to TAU in a real world setting for 40 participants with a personality disorder and at least 5 days of self-harm in the previous year.</p> <p>DURATION: 1 year</p>	<p>Results: Intention-to-treat analysis found a statistically significant treatment by time interaction for self-harm (incidence rate ratio 0.91, 95% CI 0.89-0.92, $p < 0.001$). For every 2 months spent in DBT, the risk of self-harm decreased by 9% relative to TAU. There was no evidence of differences on any secondary outcomes. The economic analysis revealed a total cost of a mean of 5,685 GBP (6,786 EUR) in DBT compared to a mean of 3,754 GBP (4,481 EUR) in TAU, but the difference was not significant (95% CI -603 to 4,599 GBP). Forty-eight percent of patients completed DBT and had a greater reduction in self-harm compared to dropouts (incidence rate ratio 0.78, 95% CI 0.76-0.80, $p < 0.001$).</p> <p>Conclusions: DBT can be effective in reducing self-harm in patients with personality disorder, possibly incurring higher total treatment costs. The effect is stronger in those who complete treatment. Future research should explore how to improve treatment adherence.</p>
2017	Flynn <i>et al.</i>	<p>Effectiveness study of 54 adult participants with BPD across four sites in community mental health settings in the Republic of Ireland.</p> <p>DURATION: 1 year</p>	<p>Results: At the end of the 12 month programme, significant reductions in borderline symptoms, anxiety, hopelessness, suicidal ideation and depression were observed. Increases in overall quality of life were also noted. In particular, gains were made during the first 6 months of the programme. There was a tendency for scores to slightly regress after the six-month mark which marks the start of the second delivery of the group skills cycles.</p> <p>Conclusions: The current study provides evidence for the effectiveness of standard DBT in publicly funded community mental health settings. As participants were assessed at the end of every module, it was possible to observe trends in symptom reduction during each stage of the intervention. Despite real-world limitations of applying DBT in community settings, the results of this study are comparable with more tightly controlled studies.</p>

stones for both client and therapist in routine clinical settings.

A limitation of a number of effectiveness studies, however, is that they examine adapted programmes targeted to the parameters of a particular community setting or may report on very targeted or small sample sizes [e.g. 58,59].

Nevertheless, these adapted or low sample size studies still report positive outcomes, showing significant reductions in the number and severity of self-inflicted injuries, hospital visits, admissions and length of stay. Participants have also reported reductions in symptoms associated with BPD, with one study finding that at the end of the programme participants no longer fulfilled avoidant personality disorder criteria [58].

Pasieczny *et al.* [60] conducted a comparison study of an adapted six-month DBT programme in a routine clinical setting. Some participants were also offered an additional six months of DBT, thus 12 month data was captured for some participants. They found that depression, anxiety and general symptom severity scores all improved in DBT participants compared to TAU at six months, and scores improved even further in those who received 12 months of DBT. Significant reductions in self-harming behaviour, emergency department visits, psychiatric admissions and bed days were also observed. Average treatment costs were significantly lower for DBT, and therapists who received Intensive DBT Training had a stronger treatment effect than those who received a 4 day basic training [60].

Priebe *et al.* [61] also found DBT to be effective in reducing self-harm in a pragmatic real world trial of the standard 12 month DBT programme offered within the NHS. They consider however that further

research needs to be undertaken on the high drop-out rate reported (52%), along with barriers to adherence within the programme for a public health service population. They consider that a real world setting will naturally include a wider and more varied sample of patients in comparison with the systematically controlled sampling approaches of randomly controlled trials (See Table 2.1).

2.2 COST OF ILLNESS

Due to the chronic nature of BPD, this client group tend to use health care resources more extensively than individuals with other personality disorders or with major depression [33,34]. This is evidenced by more frequent and continued use of outpatient and inpatient treatment and high use of prescribed psychotropic medication [33,34]. In addition, there is a strong relationship between BPD and poor occupational functioning [62,63]. Therefore, this client group is characterised by recurring crises, hospitalisations, self-harm, suicide attempts, addictions, episodes of depression, anxiety and aggression and lost productivity, explaining why BPD is considered one of the most expensive mental disorders [64,65].

Recent cost-of-illness (COI) studies of BPD in Spain and the Netherlands consistently report that BPD is associated with high COI, as well as indicating that the composition of costs vary considerably [65,66]. While there are variations in the identification of health care and societal costs in these studies, they identify national variations in BPD treatment. For example, medications accounted for 2% in the Netherlands [62] but 25% of total costs in Spain [66]. This suggests variations in national treatment strategies, although clinical guidelines for BPD (where they exist) advocate behavioural and community support in preference to hospitalisation

and medication [35,36]. Given these variations in practice across jurisdictions, examinations of current practice are required on a country-by-country basis.

In 2006, the overall total economic and social cost of mental health problems in Ireland was estimated to be over 3 billion [67]. However, other than a cost-of-illness study of schizophrenia conducted by Behan *et al.* in 2008 [68], mental health condition-specific cost-of-illness studies have not been conducted in Ireland. Therefore, the micro-costing study of BPD conducted as part of this project contributes to the limited literature on resource use and costs in community mental health services in Ireland [69]. Details of this study are contained in Section 6.3.

2.3 DBT WITH ADOLESCENTS

Standard DBT has been adapted to make it more developmentally appropriate for adolescents who have borderline personality presentations such as emotional dysregulation and self-harm behaviours [70]. Dialectical Behaviour Therapy for Adolescents (DBT-A) utilises a similar format to standard DBT including weekly individual therapy, group skills training, phone coaching and team consultation for the DBT therapists.

As part of the DBT-A adaptation, the treatment duration is reduced to a 16-week programme as recommended by the treatment developers [70]. More recently, a 24-week programme has been suggested as a more suitable treatment duration [71]. In addition to the modules covered in standard DBT, a new module 'Walking the Middle Path' has been introduced to address adolescent-family dilemmas. Parent/guardians are included in the weekly skills group training as part of a multi-family group component in order to increase

generalisation of skills and enhance parent/guardians' capacity to validate and support adolescents more effectively [70,71].

Evidence for the efficacy and effectiveness of DBT-A is still in its infancy. Mehlum *et al.* [72], were the first to report a randomised trial where DBT-A was found to be superior to an enhanced usual care group in reducing self-harm, suicidal ideation and depressive symptoms.

Other studies have demonstrated the effectiveness of DBT-A in reducing self-harm and suicidal behaviour, emotional dysregulation and depression in inpatient settings [73], in outpatient and community settings [74–76] and in residential settings [77]. A review by MacPherson *et al.* [78], found that DBT for adolescents was associated with significant reductions in inpatient hospitalisations, attrition and behavioural incidents when compared to TAU groups. A recent meta-analysis reported decreased non-suicidal self-harm as well as improvement in depressive symptoms for adolescents following DBT [79].

2.3.1 Parent/guardians of DBT-A participants

As part of the multi-family component of DBT-A, parent/guardians attend the weekly group skills sessions. This allows both parent/guardians and adolescents to strengthen and generalise their skills in the presence of the DBT therapist, while the parent/guardian also simultaneously learns skills which enables them to both act as a coach, and interact more effectively with their child [70].

Research to date on parent/guardians who participate in DBT-A programmes with a child who exhibits self-harming behaviour is limited. However, some studies which explore parental experience of self-harming adolescents report that parents can

have feelings of burden, grief and stress as a result of their child's mental health difficulties and self-harm behaviours [80–83]. To date only one study has examined parental outcomes in DBT-A, in which a reduction in depressive symptoms was reported at the end of the programme [76].

2.4 DBT IMPLEMENTATION

Previously identified barriers to DBT implementation include lack of financial support, absence of management buy-in, lack of prioritisation of DBT as a treatment option, inadequate planning for programme delivery, competing therapeutic priorities, staff attrition and insufficient protected time for DBT [84–86]. In addition, Swales, Taylor and Hibbs [85] found that challenges frequently result in teams typically disbanding at years 2 and 5.

Factors reported to facilitate successful DBT implementation include: organisational support (including funding and time to deliver the intervention); supervision; team cohesion, skill and leadership; and observation of positive clinical outcomes [85,87].

Detailed implementation planning is required in order to maximise successful and sustainable implementation of DBT programmes.

Specifically, the literature recommends assessing whether DBT aligns with organisational-goals and whether the organisational resources are sufficient to provide DBT alongside existing interventions [46,88,89]; improving organisational-level support through education [46,86]; carefully selecting staff for training and providing training on an ongoing basis to counter staff attrition [85,88]; monitoring intervention effectiveness and communicating results back to stakeholders and providing an environment to foster team communication, cohesion and supervision [85,87]. These themes have also been supported by agency administrators planning to implement DBT [89].



CHAPTER THREE

DBT in the Irish Mental Health Service

Overview: This chapter outlines the Irish Health Service Executive (HSE) Community Mental Health Service structure. Ultimately, a coordinated service implementation needs to work as seamlessly as possible within this structure.

3.1 HSE MENTAL HEALTH SERVICE STRUCTURE

The Health Service Executive (HSE) is the national health provider in Ireland and has responsibility for delivering all public health services in Ireland [90]. There are four core areas of health service for the Irish population: acute hospitals, social care and disability, mental health and primary care. About 90% of mental health difficulties are addressed through the primary care system in Ireland [6]. The remaining 10% (approximately) of individuals will require more specialist care which is accessed through mental health services.

This secondary level care encompasses more specialist interventions delivered by mental health professionals such as psychiatrists, psychologists or mental health nurses. Most of the activity of mental health services in Ireland is carried out in the community which means that people with mental health difficulties are typically seen in outpatient settings, day hospitals, day centres and at home [6].

3.2 RECOMMENDATIONS FOR THE ESTABLISHMENT OF DBT TEAMS IN IRELAND

The *A Vision for Change* report (Section 1.2) recommended that a dedicated DBT team should be established in each catchment area across the HSE.

In 2006, at the time *A Vision for Change* was published, catchment areas in the HSE had an average population of about 300,000 (ranging from 200,000 to 400,000) and comprised two to three local health offices. Within the catchment area, services were provided by multidisciplinary community mental health teams. The population unit looked after by each community mental health team was referred to as a sector.

The *A Vision for Change* report recommended that each individual who would commit to developing the DBT service in a catchment area would be seconded from their existing sector community mental health team to focus on developing this specialist therapeutic service.

Since *A Vision for Change* was published, health service structures have changed. Functional Community Mental Health units operate on a population size of approximately 50,000 as per the *A Vision for Change* 2006 recommendations.

3.3 DBT TEAMS IN COMMUNITY SETTINGS

Following the recommendations of the U.K. licensed provider of Intensive Training™, at the time the project was developed a typical DBT team was comprised of personnel from a variety of backgrounds such as: psychology, psychiatry, mental health nursing and other allied mental health related disciplines.

A team forms when multidisciplinary staff from multiple Community Mental Health teams come together in a geographical area and work together to provide specialised intervention for the population of that greater area (see Figure 3.1). This format facilitates each member of the DBT team to have dedicated time (1.5 days per week) to support

the delivery of an adherent DBT programme ensuring all modalities of the treatment are delivered (See Section 4.6 for more detail).

While it is possible to have a specialist DBT team that works in parallel to existing community mental health teams, this is costly, both to the health service and the therapist, as research to date has found that working exclusively with at-risk populations has a higher rate of therapist burn-out [91].

At the time of establishment of DBT in community services in Ireland, the secondment model was the most feasible approach for this national initiative as it was in line with national mental health policy framework recommendations and was appropriate within the economic climate in Ireland at this time.

3.3.1 Training Requirements

The U.K. licensed provider of Intensive Training™ specifies that each team who wants to train in DBT must meet the following requirements [92]:

- A minimum of four team members and a maximum of ten. (*This was changed to a maximum of eight from 2015 onwards*)
- Must have either a clinical /forensic/counselling psychologist OR a person with demonstrable graduate training in behaviour therapy
- Must be genuine teams i.e. who either are already or have explicit plans to meet together to deliver a comprehensive DBT programme to a group of clients in a single setting e.g. out-patient adult clients
- Each individual team member must be employed by a healthcare organisation that expects them to be seeing clients and must be registered to practice with a regulatory professional body

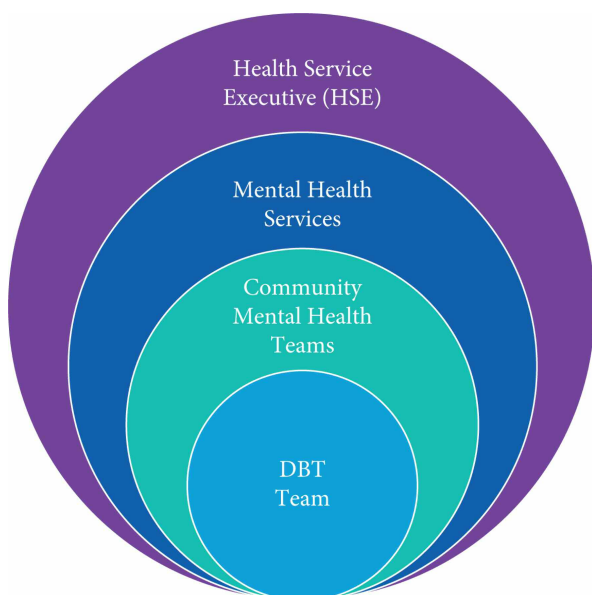


Figure 3.1 DBT teams in context of the HSE [85]

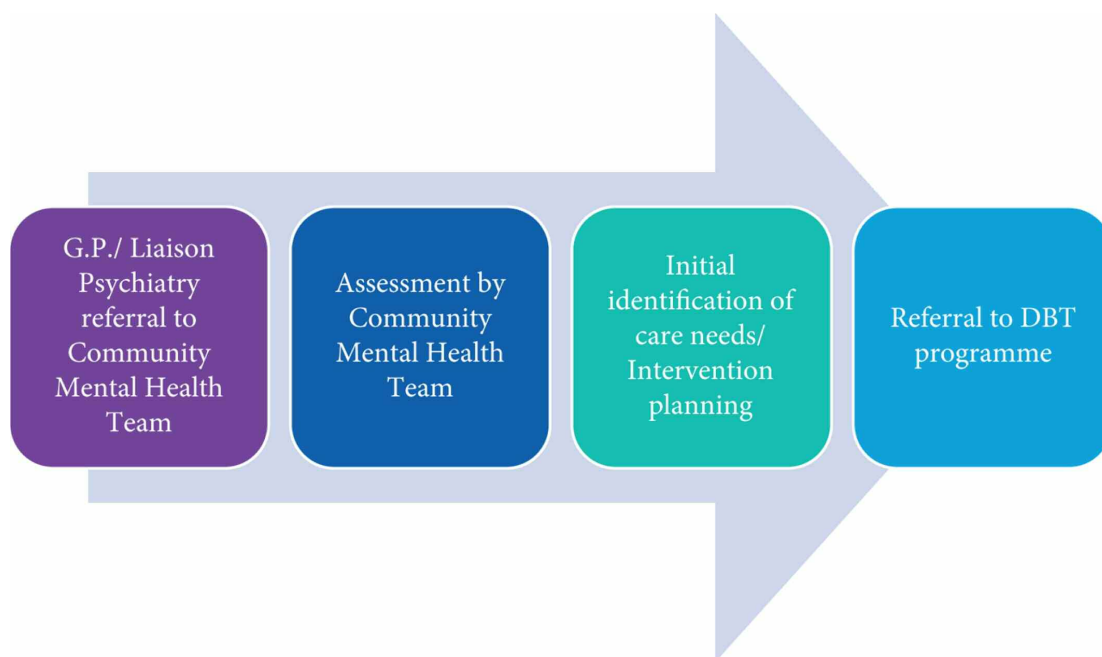


Figure 3.2 Typical referral pathway for accessing DBT in public health services in Ireland [85]

- Each team member must commit at least 1.5 days per week to learning and delivering DBT

3.3.2 DBT Referral Process

Teams who train in DBT in Ireland are typically based in community-based second level care services (i.e. Adult Community Mental Health Teams or Child and Adolescent Mental Health Teams).

Access to Community Mental Health teams is usually via General Practitioner (G.P.) referral or via the Liaison Psychiatry services attached to General Hospital Accident/Emergency Departments.

Referrals are reviewed by the Community Mental Health Team; the processes by which referrals are considered varies by location but would ordinarily involve review by a Consultant Psychiatrist and in some areas, may include Multidisciplinary Team initial assessment, and/or triage by a Team Co-ordinator.

Based on initial and ongoing assessment, the Community Mental Health Team will consider interventions such as DBT as part of an ongoing care plan to address the individual's clinical need (Figure 3.2).

“*DBT has made me a new man.
Every day I use some kind of DBT skill.*”

DBT programme participant

*“ I wish I had this when I was 18 and I
wish the course was a bit longer. ”*

DBT programme participant

CHAPTER FOUR

National DBT Project Development

Overview: Learning from previous research and identifying frameworks that might best overcome barriers to national implementation was crucial to the design and development stages of this project. This chapter outlines the project development process for the coordinated implementation of DBT within the community mental health service in Ireland.

4.1 PILOT PROJECT

As earlier outlined in Section 1.6.3, a DBT team was established in the Cork North Lee AMHS in response to a growing incidence of self-harm repetition in the region, a lack of specialised services available for the treatment of these behaviours, and the recommendation by the *A Vision for Change* report that DBT be established in community outpatient settings [6]. An evaluation of the first DBT programme which was implemented in this service during 2010/11 highlighted significant reductions in constructs relevant for individuals with BPD including borderline symptoms and suicidal ideation from pre- to post-intervention. A significant reduction in health service resource use was also noted for the 12 participants who completed the programme [93,94].

Following on from the positive findings of the first delivery of DBT in Cork North Lee AMHS, the Cork North Lee DBT team leader put forward a request to local management to expand DBT to the greater Cork region. The management team supported this request and with an agreement of additional funding from the National Office for Suicide

Prevention (NOSP), a further three teams in Adult Mental Health Services across Cork City and County completed DBT training in 2012 [93].

4.2 FUNDING FOR NATIONAL IMPLEMENTATION

It was identified that an increasing number of funding requests were being submitted to the NOSP from individual teams across Ireland for both DBT training and associated supports. Following the effective implementation and evaluation of DBT across Cork city and county, the Cork North Lee DBT team leads drafted a proposal for submission to the NOSP requesting funding to train DBT teams across Ireland in a coordinated manner, based on clinical and population need. The bid was successful and with the support of the NOSP, the National DBT Project Ireland was established.

Funding was initially granted for a two year project which would involve training of 16 new DBT teams in both Adult Mental Health Services (AMHS) and Child and Adolescent Mental Health Services (CAMHS) across Ireland. As this was the first project to coordinate implementation of DBT at a national

level, funding for a comprehensive evaluation of the implementation was also included in the proposal.

4.3 ESTABLISHING THE PROJECT TEAM

Upon acceptance of the Cork North Lee DBT team proposal, the DBT team lead, Mr Daniel Flynn, was asked to take on a coordinating role in establishing the National DBT Project. A support team was recruited to coordinate the implementation of DBT across Ireland and carry out an extensive evaluation at each of the multiple sites. The team would also be responsible for disseminating the findings from the evaluation both nationally and internationally.

A coordinator, administrator and research team were appointed to coordinate and manage this national implementation initiative. The team had the following roles:

Co-ordinator

- To orientate, guide and provide support to teams selected to attend DBT training
- To monitor the implementation of DBT programmes by recently trained DBT teams
- To work with the clinical leads to design the protocol for the project
- To lead the multi-site research evaluation of the overall project
- To manage and guide the day-to-day operation of the research team
- To prepare research findings for dissemination

Administrator

- To coordinate and manage the training application process for teams
- To manage the budget for training and ongoing supervision for all teams

- To provide financial assistance where possible for associated resources requested by teams
- To prepare annual reports and budget submissions for the funding provider

Both the coordinator and administrator also acted as a point of contact for all teams who trained with the National DBT Project and worked closely with the clinical leads to provide direction and support to teams who faced implementation difficulties.

Research Officers

- To support the clinical lead and co-ordinator with protocol development for the national multi-site study
- To act as a point of contact for individual teams for the purpose of the research evaluation
- To collect data from the sample population across multiple sites
- To input, prepare and analyse data for dissemination
- To prepare reports and peer-reviewed articles for dissemination

In addition, Dr Mary Kells, who trained as part of the original Cork North Lee team agreed to act as clinical advisor to the project.

4.4 IMPLEMENTATION FRAMEWORK

Consideration of implementation science and DBT implementation literature in particular was central in steering this coordinated national initiative.

The Consolidated Framework for Implementation Research (CFIR) developed by Damschroder *et al.* [95], was identified as the most appropriate guiding framework for this national implementation. This framework facilitates revisiting, expanding, refining

and re-evaluating throughout the course of the implementation.

Consisting of five constructs, the CFIR 'Process' construct was seen to be of most relevance and benefit in guiding this coordinated implementation effort. The 'Process' construct involves: planning, engaging, executing, reflecting and evaluating [93].

4.5 ACTIONING THE PROCESS CONSTRUCT

4.5.1 Planning

Preparing the funding submission was a natural start for the planning process. As the first national coordinated implementation of DBT in a publicly funded health system, it was recognised from the outset that there was a natural opportunity to conduct a research study in tandem with the national training and implementation rollout.

4.5.2 Governance

A National Steering Group Committee was established to ensure robust governance of the investment made by the NOSP in the National DBT Project.

The steering group functions were:

- To oversee how best to co-ordinate training in DBT and allied interventions in Ireland
- To ensure continued high quality research
- To ensure service users meaningful involvement in DBT and allied interventions in Ireland

The steering group comprised mental health experts, mental health management representatives, DBT experts, research experts, policy developers, a service user and a family representative.

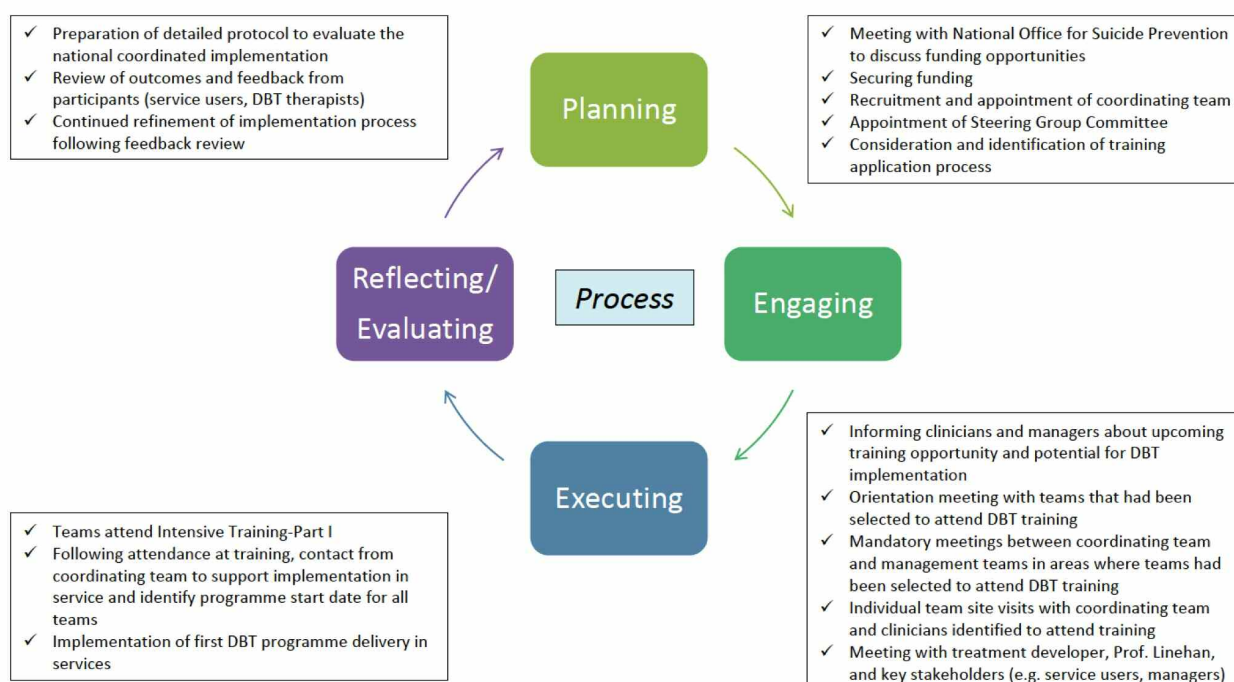


Figure 4.1 Consolidated Framework for Implementation Research – 'Process' Construct [90]



Left to right: Professor Marsha Linehan, DBT Treatment Developer; Kathleen Lynch, Minister of State for Disability, Equality & Mental Health (2014), Daniel Flynn, Principal Psychology Manager, Cork/Kerry Community Healthcare and National DBT Project Clinical Lead

DBT treatment developer, Professor Marsha Linehan, was very supportive of the National DBT Project. As well as meeting key stakeholders, Professor Linehan also conducted a DBT skills training workshop with the Irish DBT therapists during the project roll-out period.

4.5.3 Consolidation and collective agreement

Six months after initial funding was secured, a meeting took place with key stakeholders to consolidate the proposal for a national implementation project.

The meeting involved the DBT treatment developer, Prof. Marsha Linehan, the then Minister for State with responsibility for mental health in Ireland, the Director of a newly established Mental Health Division in the public health system, the Director of the NOSP, local managers, and DBT champions, including DBT therapists, service users and family members who had benefitted from participating in the DBT and allied family programmes in the greater Cork region. For the first time, the treatment

developer, clinicians, service users, mental health service management and political leadership agreed to work collectively to support a systematic DBT implementation.

4.5.4 DBT Team Training Application Process

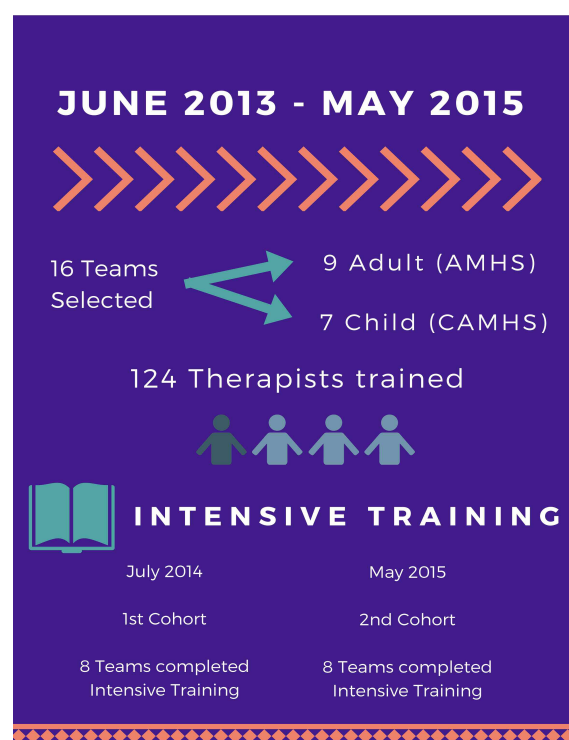
In an attempt to address previously identified implementation barriers (see Section 2.4), a DBT training application form was developed which required evidence of support from each area management team. This support was gathered in the form of the Executive Clinical Director or nominated Area Mental Health Management representative signing off on the application form to indicate their awareness of the application and training requirements.

4.5.5 Commitment requested of Teams

A 2 year commitment was requested from DBT team members, with each staff member committing to allocate 1.5 days per week to deliver DBT to the service. All applications were collated by the coordinating team, minimum requirements for training were proposed (see Section 4.6), and all applications were reviewed and considered by the Steering Group Committee who had overall oversight and responsibility for prioritisation of teams and allocation of training places.

4.5.6 Adherence

Adherence to the DBT programme was also considered in the planning phase and therefore a budget for expert supervision for each team was also built into the overall funding proposal. To address the previously identified implementation barrier of staff turnover, additional training to facilitate the expansion of already established teams was also included in the budget for this national implementation.



4.5.7 Building the teams

During the period June 2013 to September 2014, multiple teams applied to the National DBT Project Ireland, to avail of DBT training; 16 teams consisting of nine AMHS and seven CAMHS teams were selected to complete Intensive Training.

Table 4.1: Teams trained by year

Year 1 (2013-2014)		Year 2 (2014-2015)		Year 3 (2015-2016)	
AMHS	CAMHS	AMHS	CAMHS	AMHS	CAMHS
Meath	Linn Dara, Dublin	Kerry	South Lee, Cork	St. James Hospital, Dublin	Lucena Clinic, Dublin
Sligo	Sligo	Tipperary South	Lucena Clinic, Dublin	Limerick	North Dublin (Swords)
Waterford	North Cork	Newbridge Kildare	Galway/Roscommon	Roscommon	North Dublin (James Joyce St)
Wexford	North Lee, Cork	East Galway		North Dublin (Raheny)	
		West Galway (GUH)			

The first cohort of eight teams completed Intensive Training in July 2014 while the second cohort completed their training in May 2015. In total, 124 therapists were trained across the 16 teams.

While staff turnover has resulted in attrition of some team members across the 16 teams, efforts have been made to replace DBT therapists through Foundational Training which facilitates the addition of new team members to established teams.

All 16 teams who trained as part of the National DBT Project Ireland were still functioning as DBT teams at 2.5 years (Cohort 1) and 1.7 years (Cohort 2) following training completion.

In 2015 a third team cohort began training, comprising four AMHS and three CAMHS teams. Thus, DBT is now offered by 23 teams throughout Ireland. However, for the purpose of this report data is based on the 16 teams that comprise the first and second cohorts.

In 2018 advanced training in DBT-Prolonged Exposure Therapy was provided to established teams.

4.5.8 Reflection and Evaluation

A vital part of the process is the development of a protocol to collect quantitative and qualitative feedback about the progress and quality of implementation, client and therapist experience, effectiveness of the intervention and cost benefit to the health service.

4.6. DBT TRAINING

4.6.1 Selection and training of teams

As outlined in Section 3.3.1, for the National DBT Project the structure of DBT teams followed the recommendations of the UK licensed training

provider of Intensive Training™. Between December 2013 and May 2015, teams that were successful in securing a training place undertook a 2-week Intensive Training™.

The training comprises 70 hours of face-to-face teaching in DBT that includes a taught programme, group and individual exercises and role-play demonstrations. Teams leave the first week of training with a comprehensive list of homework assignments that relate to setting up a DBT service and further developing their skills in delivering the treatment. During the second week of training, teams present their service structures and individual cases, and receive feedback and consultation on how to further enhance their service delivery and therapeutic skills.

Two cohorts of training took place where eight teams (both adult and child and adolescent mental health teams) attended each event. Training for each cohort of teams was centralised in one location where two DBT trainers travelled to Ireland to deliver parts 1 and 2 of the training.

4.6.2 Supervision

Expert supervision was provided to all teams with 36 hours available to each team per year. Supervision was provided by internationally accredited model adherent DBT supervisors in Europe (United Kingdom, Norway and Austria) and the United States. Supervision was dependent on supervisor availability and was negotiated between the team and supervisors to meet the individual team requirements. Supervision typically involved input to the team consultation meeting via phone or video conference, discussion of clinical cases and a review of a proportion of audio-taped sessions with feedback from the supervisor. Whilst tapes were not rated for adherence, all supervisors were

qualified to make adherence ratings and able to provide feedback to teams to shape increasing adherence to the treatment. Early supervision sessions tended to focus on programme set-up issues with an increasing focus on therapeutic skills as the project progressed.

SUMMARY

Implementation science and previous DBT implementation research highlighted the multiple

challenges that needed to be considered to maximise the likelihood of successful service improvement and sustainability of change. By proposing solutions to overcome relevant barriers highlighted by previous research, and using a framework to help guide this implementation, it was possible to pre-empt potential barriers for this national initiative and propose solutions for overcoming these likely barriers. This is summarised below in Table 4.2.

Table 4.2: Management of barriers and facilitators to DBT implementation in the National DBT Project

BARRIERS/FACILITATORS	MITIGATED BY:	DETAILS ON HOW BARRIERS AND FACILITATORS WERE ADDRESSED
BARRIERS		
Lack of financial support	Centralised funding	Funding for training, supervision and resources through national coordinating office
Absence of management buy-in	Management sign off at training application stage	All application forms had to be countersigned by management in the DBT team's service area to verify that: <ul style="list-style-type: none"> - Proposed DBT team would be released from clinical duties to attend intensive training - Management would support local costs associated with training attendance (e.g. travel, subsistence) - Each DBT team member could dedicate 1.5 days per week for DBT implementation for a minimum of two years
Lack of prioritisation of DBT as a treatment option	Training application form; Orientation meeting	DBT teams were required to provide a rationale as to how and why DBT could be implemented in their service area at training application stage; <p>Prioritisation of DBT as a treatment option in the service area was discussed at orientation meeting with all teams prior to training</p>
Inadequate planning for programme delivery	Written documentation; Orientation meeting; Individual team site visit	Written documentation about setting up a DBT programme and relevant reading lists were circulated to all teams before training; <p>Planning for programme delivery was discussed at orientation meeting and individual site visits with all teams prior to training;</p>
Competing therapeutic priorities	Training application form	All application forms had to be countersigned by management in the DBT team's service area to verify that each DBT team member could dedicate 1.5 days per week to prioritise working with this high-risk group
Staff attrition	Training application form; Foundational training	At training application stage, the team leader was required to verify that each DBT team member would dedicate 1.5 days per week for DBT implementation for a minimum of two years. Application forms were countersigned by management in the service area; <p>Foundational Training was provided through the coordinating office on an annual basis to replenish teams with staff attrition</p>
Insufficient protected time for DBT	Training application form	All application forms had to be countersigned by management in the DBT team's service area to verify that each DBT team member could dedicate 1.5 days per week for DBT implementation for a minimum of two years
FACILITATORS		
Organisational support	Coordinating team	Coordinating team including project coordinator, administrator, research support team to support teams in their implementation
Supervision	Expert supervision	Panel of international experts who would provide regular DBT supervision to all DBT teams
Team cohesion, skill and leadership	Team consult; Additional training; Expert supervision	All teams were required to deliver all modes of treatment including weekly team consult; <p>Additional training (skills training workshop, DBT team leader training) was delivered by the treatment developer and expert trainers;</p> <p>Expert DBT supervision was included for all DBT teams and was contingent on all modalities of DBT being delivered.</p>
Observation of positive clinical outcomes	Research evaluation	Comprehensive research evaluation of national implementation reported on clinical effectiveness of DBT for clients; <p>Findings from research evaluation would be disseminated through peer reviewed articles, conference presentations, annual reports;</p> <p>Feedback would also be provided to each team on programme outcomes in their service</p>

“ Six months on it's obvious to myself and others that my life has changed for the better. The one on one sessions continuing after DBT finished were an invaluable part in achieving how I wanted to feel as it allowed me to stay focused on the skills. I can honestly say I am more excited now about the future than I have ever been in my life. ”

DBT programme participant

CHAPTER FIVE

Research and Evaluation of DBT in Ireland

Overview: This chapter gives an overview of the approach taken by the *National DBT Project, Ireland*, to incorporate a research study into the national multi-centre rollout of the DBT mental health intervention.

5.1 AIMS OF THE NATIONAL DBT RESEARCH PROJECT

The established aims of the research evaluation for the *National DBT Project Ireland* were to:

- Evaluate the effectiveness of DBT programmes in Community Mental Health Services in Ireland
- Evaluate the coordinated implementation of DBT in a publicly funded health system
- Complete an economic evaluation of DBT versus no DBT in Community Mental Health Services in Ireland

5.2 STUDY DESIGN

This study was originally designed to include a comparison group in an attempt to ensure a rigorous study and evaluation design. At the onset of this study, there was no alternative system wide evidence-based intervention available for this client group that could have been used for comparison purposes. Additionally, in abiding with ethical guidelines and appropriate care of patients, neither

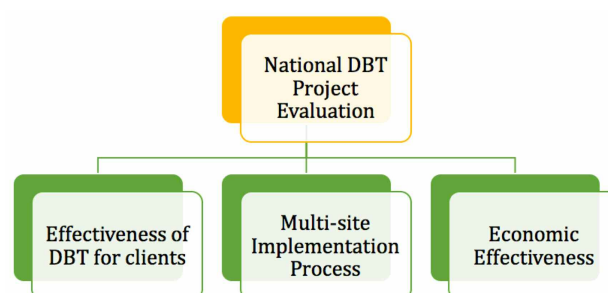


Figure 5.1 Research evaluation aims

was it possible to withhold treatment for individuals who met criteria for participation in the intervention. Therefore, it was not possible to randomly allocate participants to a DBT intervention, comparable intervention or control group for the purposes of this study.

However, it was also recognised that as the first national study of DBT in a public health community setting, the National DBT Project team had an opportunity to assess the effectiveness of DBT in a real world routine clinical setting. Thus, a quasi-experimental design was ultimately chosen as the best fit for the study.

5.3 STUDY SETTING

The setting for this study is Community Mental Health Services within Ireland's public health service, the Health Service Executive (HSE), where participants attend outpatient community clinics to obtain the intervention.

Community Mental Health Services are regarded as secondary level care and encompass specialist interventions delivered by mental health practitioners such as psychiatrists, psychologists, mental health nurses and other mental health professionals. Community mental health services in Ireland are typically provided in outpatient settings, day hospitals, day centres and at home [6].

There are 16 independent sites for this study which cover both urban and rural areas in adult and child and adolescent mental health services.

5.4 ETHICS

5.4.1 Ethics Approval

Research ethics approval was sought and obtained from all relevant research ethics committees at the multiple sites of this research study. All procedures were reviewed and approved by the following research ethics committees: Clinical Research Ethics Committee of the Cork University Teaching Hospitals, Galway Clinical Research Ethics Committee, HSE Mid Western Regional Hospital Research Ethics Committee, HSE North East Area Research Ethics Committee, HSE South East Area Research Ethics Committee, Linn Dara & Beechpark Ethics Committee, Naas General Hospital Ethics Committee, Saint John of God Hospitalier Ministries Research Ethics Committee and Sligo General Hospital Research Ethics Committee.

5.4.2 Informed Consent

All participants who started the DBT programme at the multiple study sites between February 2014 and February 2016 were invited to participate in the research study. Potential participants were informed that participation in the study was voluntary and that non-participation in the study would not affect their treatment in any way. Participants could withdraw their participation at any time without providing a reason. All participants were asked to sign an informed consent form.

5.5 DATA PROTECTION

Data is filed and stored in accordance with HSE policy and the Irish Data Protection Act of 1988 and the Irish Data Protection (Amendment) Act of 2003 and the GDPR requirements enacted through the Data Protection Act 2018.

5.6 OUTCOME MEASURES

5.6.1 Effectiveness Evaluation

Primary outcome measures for DBT participants in this study directly map onto DBT treatment targets which are:

- Reduction of life threatening behaviours
- Reduction of treatment interfering behaviours
- Reduction of quality of life interfering behaviours
- Increase in skill utilisation

More specifically, the treatment target, corresponding measurement variables, and participants are outlined in Table 5.1 and illustrated in Fig 5.2.

Secondary outcome measures were completed by DBT therapists to provide an objective perspective on patient functioning at each time point. The measures completed by DBT therapists

Table 5.1: Treatment targets, measurement method and reporting method for primary outcomes (See Fig 5.2) [129]

Treatment target	Measure administered to			
	Measure	Adults	Adolescents	DBT Therapists
Life threatening behaviours	Self-harm	✓		
	Self-harm Inventory			
	Client record form ¹			✓
	E.D. visits			✓
	Hospital admissions			✓
Treatment interfering behaviours	Suicidal Ideation	✓	✓	
	Questionnaire for suicidal ideation			
	Attendance			✓
	Individual therapy/group skills logs ³			
	Use of phone coaching			✓
Quality of life interfering behaviours	Depression	✓		
	Beck Depression Inventory – II		✓	
	Beck Depression Inventory-Youth			
	Borderline symptoms	✓	✓	
	Borderline Symptoms Checklist			
	Hopelessness	✓	✓	
	Beck Hopelessness Scale			
	Quality of life	✓	✓	
	EQ-5D-5L			
	Dysfunctional coping	✓	✓	
Skill utilisation	Anger	✓		
	STAXI - 2			
	STAXI - C/A		✓	
	DBT ways of coping checklist	✓	✓	

¹ Developed by research team in consultation with DBT therapists to systematically gather data pertinent to our public health service. Self-harm behaviour frequency and type, number of Emergency Department visits, and number and duration of acute psychiatric inpatient admissions per patient.

³ Developed by research team and outlined in more detail under *Implementation Evaluation*

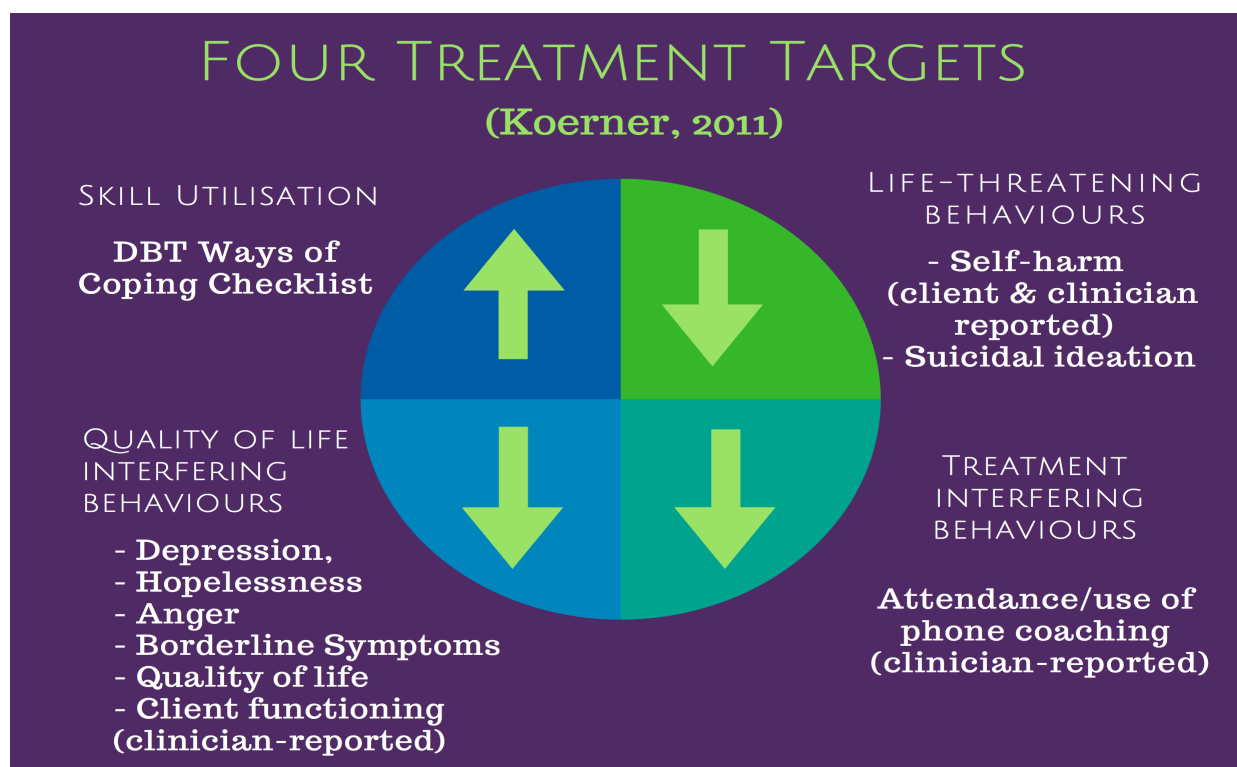


Figure 5.2 Treatment Targets

for adult participants are the Global Assessment of Functioning [97] and the Health of the Nation Outcome Scales [98]. The corresponding adolescent versions of these scales were used for the adolescent participant group [99,100].

Constructs relevant for family members of individuals with behavioural and emotional dysregulation were assessed through scales which measure parental stress [101], burden [102] and grief [103].

5.6.1.1 Development of scale to measure suicidal ideation

A questionnaire for suicidal ideation was developed by the research team for the purposes of the study. Previous measures of suicidal ideation were identified as unsuitable for the purpose of this study (e.g. Beck Scale for Suicide Ideation refers to plans in addition to suicide ideation). Measures of suicidal ideation were reviewed and used to inform

items for inclusion in the new scale. Statements which focused on thoughts about suicide in the past week were included in the new questionnaire. The final questionnaire consists of 6 items which assess thoughts about suicide in the past week. Items are scored on a 5 point scale from 'Not at all' to 'Daily or more.'

5.6.2 Economic Evaluation

A client record form was developed for DBT therapists to track detailed information about service utilisation and resource use by DBT patients. This form was tailored for each service area to include area specific practices and facilities in addition to the main core services and practices common to all areas. Information was resourced from clinical files. The main areas covered included:

- Diagnostic criteria used
- Evidence of self harm, frequency and type of self harm in previous 6 months

- Ambulance use
- Accident & Emergency Department use
- Inpatient admissions and duration
- AMHS service use (unrelated to DBT)
- Non-AMHS HSE funded mental health service use
- Medication type and use

Effectiveness outcome measures (e.g. EQ-5D-5L and BDI-II) were also used to inform the economic evaluation.

5.6.3 Implementation Evaluation

The coordinated implementation was evaluated in the following manner:

The **quantity** of implementation was measured through individual therapy and group skills attendance logs which were recorded by the DBT therapists on a weekly basis. These DBT Programme Logs were developed for the purposes of this study (reporting individual therapy and group skills attendance, self-harm behaviour and urges, and skills use in the last week).

The **quality** of implementation was measured through the Programme Elements of Treatment Questionnaire (PETQ; [87]).

DBT therapists' **adherence** to the DBT model were assessed on an ongoing basis by the expert DBT supervisor working with each team.

DBT **participants' experiences** of the programme were assessed through a survey which was specifically developed for the purpose of this study. Survey questions request feedback on overall quality of the intervention, usefulness of content, and effectiveness.

Therapists' experiences of the coordinated implementation were measured through surveys which were developed based on international DBT implementation research. Survey questions covered areas such as: training, supervision, implementation facilitators and barriers, and experience of coordinated implementation.

5.7 DATA COLLECTION

Newly established teams who trained as part of the *National DBT Project, Ireland* were requested to inform the researchers of the start date of their DBT programme. Data collection was scheduled in advance with the DBT team at each location allowing a two week window only around each time point. All individuals who partook in the DBT programme at each of the 16 sites between February 2014 and February 2016 were invited to participate in the study.

A group data collection session took place at each time-point at each of the study sites with a member of the research team present to collect the data. Prior to baseline data collection, each DBT team was provided with Participant Information Leaflets to distribute to patients to orientate them towards the research study.

At the first data collection, patients had an opportunity to ask questions regarding the study and their participation in same and return their signed consent forms to the researcher. It was outlined to all participants that while participation in the study was and is confidential, there was a limit to confidentiality. In order to maintain the safety of patients, a risk assessment had to be conducted following data collection at each site, the results of which were communicated to the DBT therapist(s) present.

Participants who were unable to attend the group data collection session but who agreed to participate in the study were asked to complete the battery of measures at their next individual therapy session. In such cases, the protocol outlined that DBT therapists reviewed answers to the risk assessment items only with the patient, prior to securely storing and then sending the completed measures to the National DBT Project Office.

5.8 ADHERENCE

DBT is a principle rather than a protocol driven treatment. It outlines a series of principles to help the practitioner decide on what to do in a given set of circumstances. The principles guide the therapist to being treatment adherent while remaining responsive to individual patient needs [45].

A diary card, which tracks a person's urges, mood, potential triggers, dysfunctional behaviours and DBT skill use, is used to help structure the individual therapy session and target which behaviours need a chain and solution analysis.

Treatment adherence was monitored by means of supervision and review of audio recorded sessions by expert DBT adherent supervisors.

5.9 DATA ANALYSIS

5.9.1 Effectiveness Evaluation

T-tests and analyses of variance were used to assess potential baseline differences in the self-report measures administered to participants. Linear mixed-effects models were used to estimate change utilising data available from participants at all time-points. These models were adjusted for clustering in the data due to repeated measures on the same individuals and the intervention being delivered across multiple sites.

5.9.2 Economic Evaluation

An economic evaluation was undertaken to determine the cost-effectiveness of DBT versus no DBT for adults with BPD who engage in self-harm. Cost analyses were performed to estimate the cost of the DBT programme and resource utilisation pre, during and post DBT. Effectiveness of the DBT programme was measured using Quality Adjusted Life years (QALYs). Pre-programme estimates were employed as the costs and effectiveness of the comparator (no DBT). The economic evaluation was conducted in line with the eight-step framework put forward by Drummond *et al.*[104]

5.9.3 Implementation Evaluation

Content analyses were carried out on the survey data provided by DBT therapists which will inform the implementation evaluation.

“ Since DBT, I don't get stressed, angry or depressed. I don't self-harm or even think about it. I eat healthy and exercise. I spend time on myself. I spent time having nature walks with my little girl and teaching her about the things around us. Before DBT I avoided going out unless I absolutely had to. I am still amazed at how far I have come and at the different person I am today. Without DBT I have no doubt that I wouldn't be here now enjoying life with my children. ”

DBT programme participant

“ I am still alive, I want to live, and live not just for my family but for myself. I don't know what the future holds, but know if I revert back to my old self I know where to go and who to talk to for help and advice and I know I have the tools, just to use them. I don't feel alone any more, and I don't feel guilty for feeling the way I feel on any given day. The DBT course was hard and I struggled but with my family's help I succeeded. I think if our partners or family could in some small way be included in the course it would benefit all concerned. ”

DBT programme participant

CHAPTER SIX

RESULTS: Standard DBT Programme for Adults - AMHS

Overview: This chapter gives an overview of the research arm of the National DBT Project, Ireland, relating to the adult BPD population in Adult Mental Health Services (AMHS)

6.1 RATIONALE

It is recommended that DBT be offered in community settings; however, evidence for the real world effectiveness of 12 month standard DBT in community settings is limited. This study investigated the effectiveness of DBT at multiple sites as part of a national coordinated implementation in a community public health service, namely the HSE.

Data were collected at four timepoints during the course of a 12 month standard DBT programme. The timepoints are outlined below in Table 6.1.

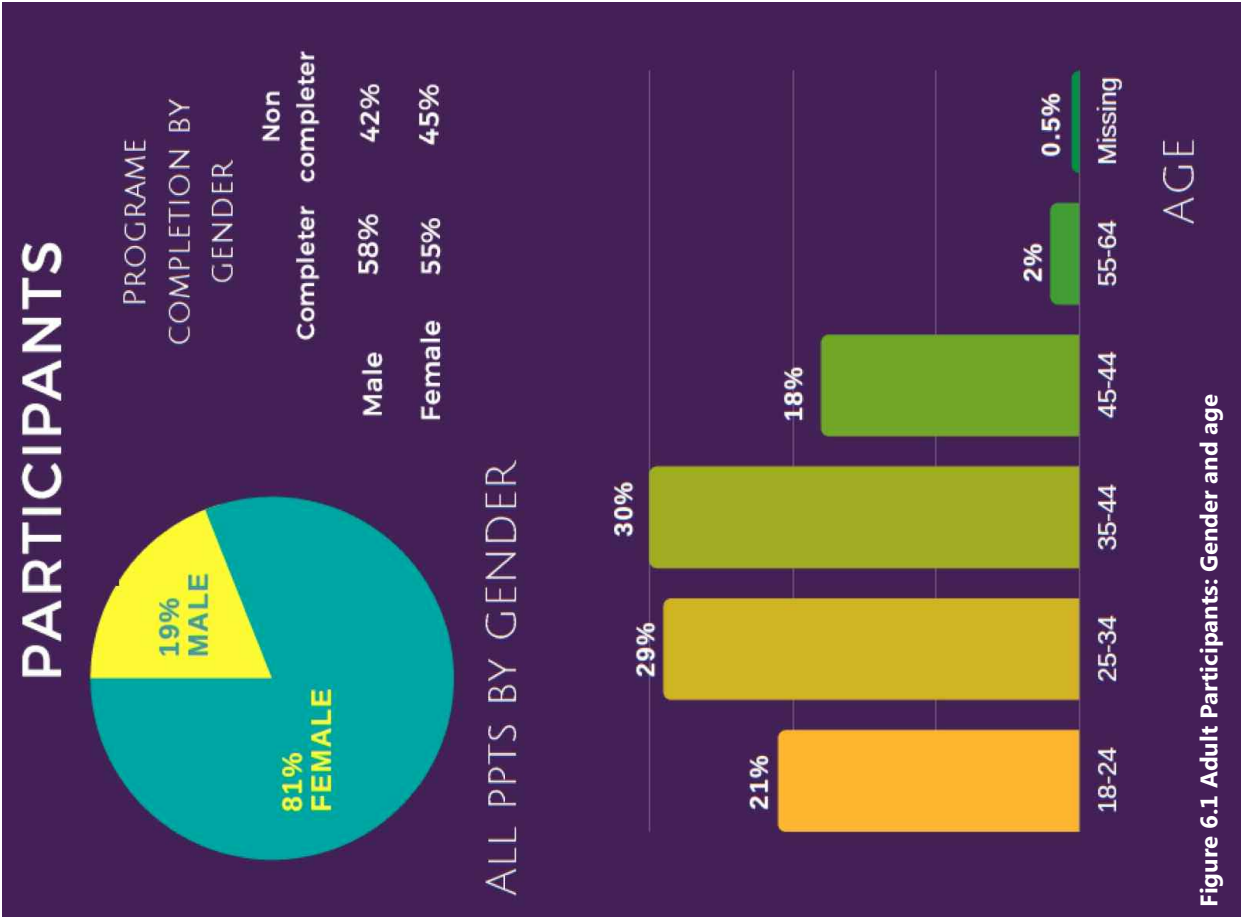
6.2 INCLUSION AND EXCLUSION CRITERIA

Inclusion criteria

- Diagnosis (or meet criteria for diagnosis) of Borderline Personality Disorder (DSM-IV-TR, [10]) or Emotionally Unstable Personality Disorder (ICD-10, [9]).
- A persistent pattern of deliberate self-harm behaviour or suicidal behaviour, with the most recent episode having occurred within the six months prior to being referred to the intervention

Table 6.1: Data collection timepoints for the participants in the adult DBT programme

TIMEPOINTS	12 month standard DBT Adult Programme
Timepoint 1 (Baseline)	Week prior to the patients' first group skills training session.
Timepoint 2	6 months after baseline (end of module 3)
Timepoint 3	12 months after baseline (end of programme completion)
Timepoint 4	18 months after baseline (6 months after programme completion)



- Will participate in all modes of treatment and have committed to participate in the standard 12-month DBT intervention

Exclusion criteria:

- An active psychosis
- Severe developmental delays, cognitive impairment or learning difficulties (that exceed the mild range)
- Substance/ drug dependence, eating disorder or any other mental health issues/behaviour is at such a level that it would impede their engaging with any of the modalities of DBT.

6.3 PARTICIPANTS

One hundred and ninety-six adults aged 18 and over within the adult mental health service (AMHS), who met criteria for a diagnosis of BPD (DSM-IV) or emotionally unstable personality disorder (ICD-10) participated in a 12-month standard DBT programme across nine independent sites. The majority of participants were female and aged 25-44 years (Figure 6.1). Single relationship status was listed for 42% of participants and 43% were unemployed (Figure 6.2).

6.4 OUTCOME MEASURES

Outcome measures were mapped onto DBT treatment targets in an effort to identify a core battery of measures for evaluation (See Section 5.8.1 for details). As the primary treatment target is the reduction of life threatening behaviours, the outcome measures presented here will focus on self-harm behaviour (frequency) and health service use for participants.

6.5 DROP OUT AND ATTRITION

Of the 196 participants, 109 participants completed the programme. Of the 87 participants who did not complete the programme, 78% (n=68) dropped out (4-miss rule); 13% (n=11) moved to another treatment; 6% (n=5) felt sufficiently recovered to stop treatment; and 3% (n=3) left the programme for other reasons, including physical health issues or having passed away from natural causes. While the majority of participants were female, when comparing completion rates by gender, 58% of males completed while 55% of females completed the programme.

6.5 RESULTS

There was evidence of decreases in borderline symptoms, hopelessness, depression, suicidal ideation, ineffective coping strategy and level and degree of expression of anger, and evidence of an increase in DBT skills use [96].

There were significant changes from six months pre-programme (T1) to end of programme (T3) on all outcome measures (see Chapter 5, Table 5.1). Improvements were maintained at follow-up.

The use of standardised scales for depression and hopelessness allow for categorisation of clinical severity level which in turn can inform clinically meaningful change for participants. For example, mean depression scores that were in the 'severe' clinical range at baseline decreased to the 'moderate' range six months in to treatment, and were at the lower end of the 'moderate' range at end of programme. Scores further reduced and were in the 'mild' clinical range when participants were followed-up six months post end of programme. The same trends were evidenced for scores on hopelessness.

Frequency of self-harm
6 months pre-intervention

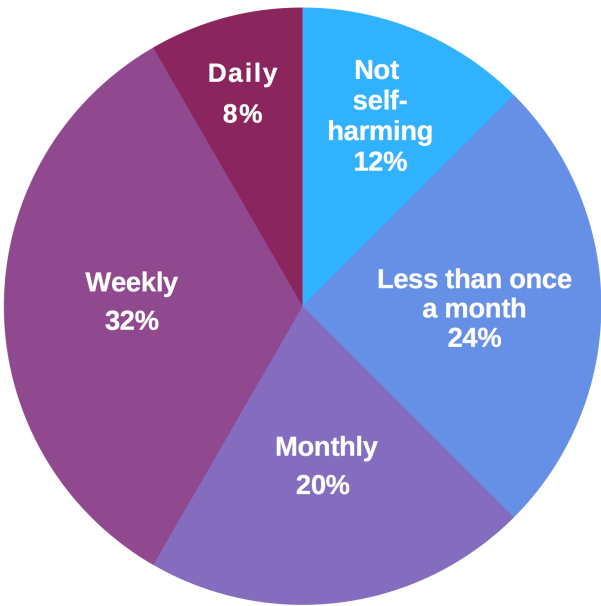


Figure 6.3 AMHS Participants: Frequency of Self-harm 6 months pre-intervention

Frequency of self-harm
6 months post-intervention

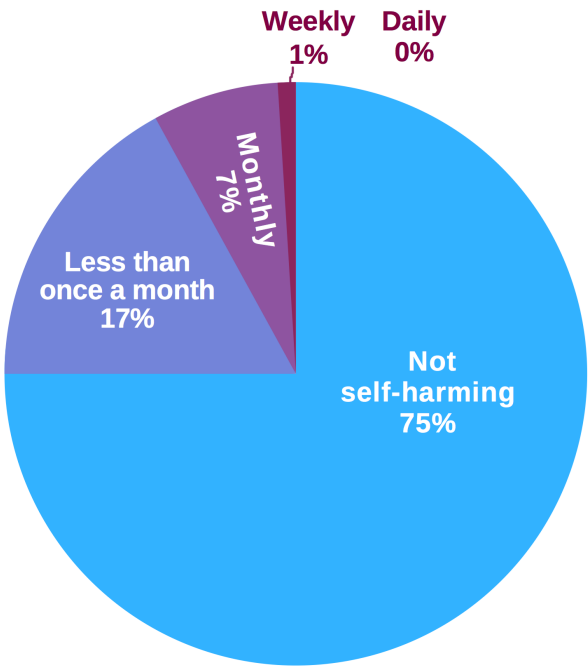


Figure 6.4 AMHS Participants: Frequency of Self-harm 6 months post-intervention

Frequency of self-harm behaviour as reported by DBT therapists is presented in Figures 6.3 and 6.4. Figure 6.3 shows frequency of self-harm during the 6 months prior to the intervention while Figure 6.4 shows self-harm frequency 6 months post-

intervention. There was a significant decrease in the frequency of self-harm from pre to post-intervention.

The Borderline Symptoms Checklist was chosen as the main outcome variable to determine the degree

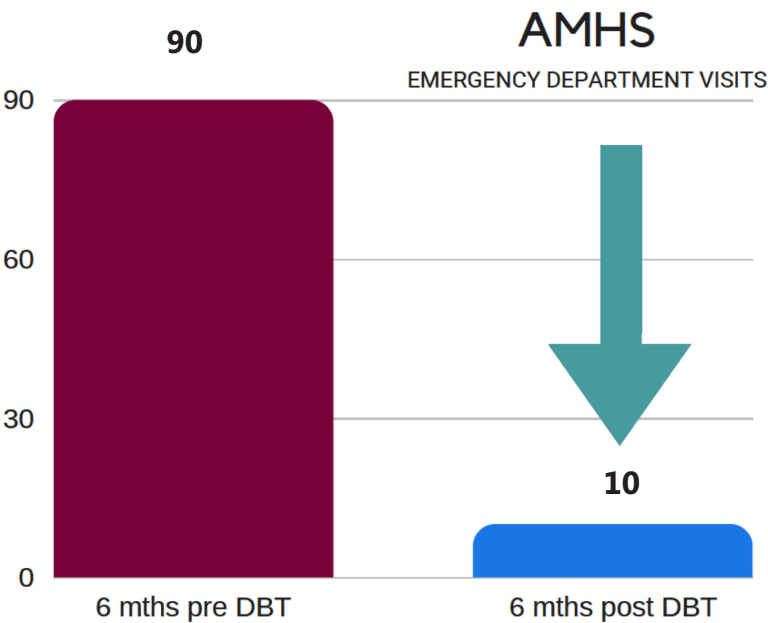
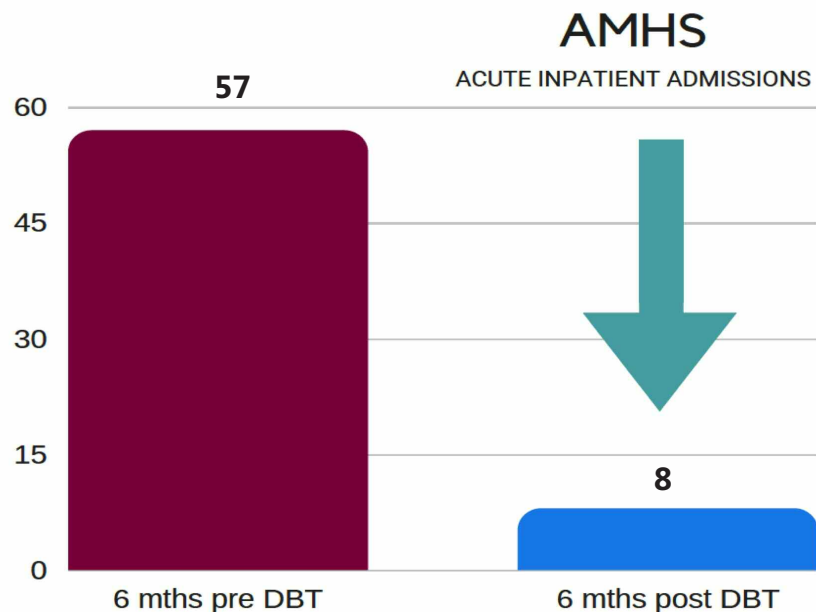


Figure 6.5
AMHS Participants: Number of Emergency Department Visits 6 months pre-intervention versus number of Emergency Department Visits 6 months post-intervention

Figure 6.6

**AMHS Participants:
Number of Acute
Inpatient Admissions 6
months pre-intervention
versus Acute Inpatient
Admissions 6 months
post-intervention**

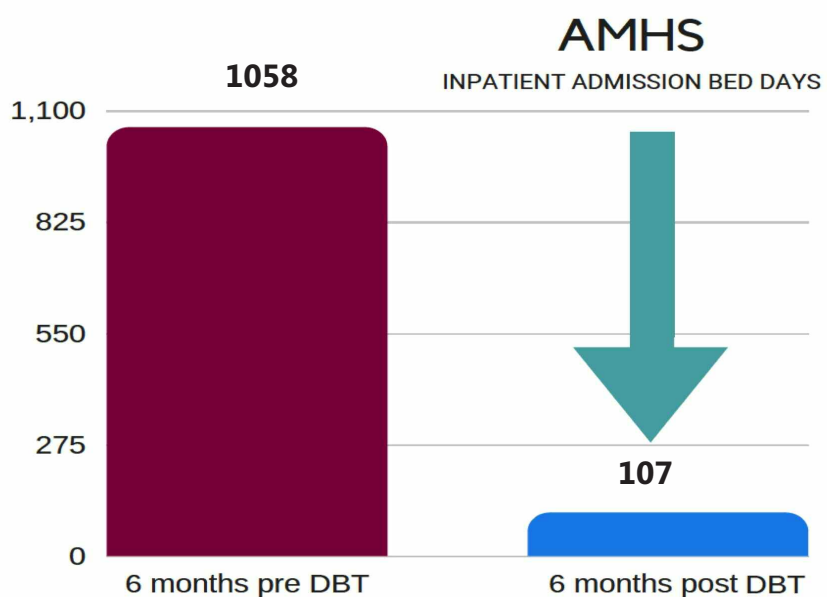


of clinically significant change and analysis of this showed that 41% of programme completers were considered recovered in a clinically relevant way by the end of programme [96]. This is further endorsed by therapist rated assessments which likewise showed an increase in global functioning scores in programme completers. These are significant findings in a population regarded as difficult to treat.

Health service utilisation showed a marked decrease in those who completed the programme. Comparison of data from six months pre-intervention to six months post-intervention showed that Emergency Department visits decreased by 89% (Figure 6.5), acute inpatient admissions by 86% (Figure 6.6) and corresponding bed days by 90% (Figure 6.7).

Figure 6.7

**AMHS Participants:
Number of bed days 6
months pre-intervention
versus number of bed
days 6 months
post-intervention**



“ I found the DBT programme invaluable as a parent and as a help to my daughter. It taught me how to approach her when she is not feeling well and it gave her concrete skills she could use on a daily basis. It has helped my daughter cope in school better. Also it was good to meet other parents and children who are going through similar circumstances. We helped each other by having empathy and some ideas to help each other in group sessions. ”

Parent/guardian programme participant

CHAPTER SEVEN

RESULTS: DBT for Adolescents - CAMHS

Overview: This chapter gives an overview of the research arm of the National DBT Project, Ireland, relating to the child and adolescent population with emotional and behavioural dysregulation in Child and Adult Mental Health Services (CAMHS).

7.1 RATIONALE

Dialectical behaviour therapy for adolescents (DBT-A) is an intervention with a growing evidence base for treating adolescents with emotional and behavioural dysregulation. DBT trained clinicians working in child and adolescent mental health services (CAMHS) in Ireland, mindful of the increasing number of self-harming adolescents presenting to their service, took part in this arm of the study on the effectiveness of DBT-A.

Data was collected at three timepoints during the course of a 16 week DBT-A programme. The timepoints are outlined in Table 7.1.

7.2 INCLUSION AND EXCLUSION CRITERIA

Inclusion criteria:

- Demonstrating emotional behavioural disturbance/ emotional dysregulation
- A persistent pattern of deliberate self-harm (as defined by Platt *et al.* [91] with an episode of self-harm behaviour or suicidal act having occurred in the past 16 weeks or chronic suicidal ideation reported
- An expressed commitment to the 16 week programme by the adolescent and parent/guardian

Table 7.1: Data collection timepoints for participants in the DBT-A programme

TIMEPOINTS	16 week Adolescent Programme
Timepoint 1 (Baseline)	Week prior to the patients' first group skills training session.
Timepoint 2	16 weeks after baseline (post-intervention)
Timepoint 3	32 weeks after baseline (16 weeks after programme completion)

Exclusion criteria:

- An active psychosis
- Severe developmental delays, cognitive impairment or learning difficulties (that exceed the mild range)
- Substance/drug dependence, eating disorder or any other mental health issue/behaviour at a level that would impede their engaging with any of the modalities of DBT

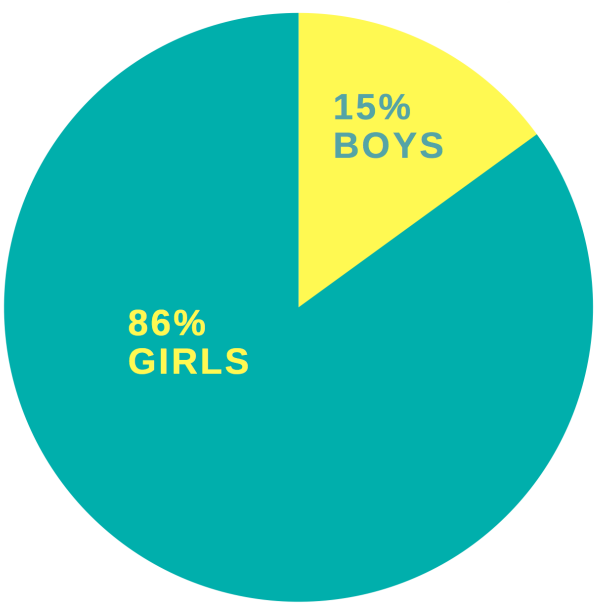
7.3 PARTICIPANTS

There were 84 participants in this study consisting of 71 females and 13 males ranging in age from 13 to 18 years. (See Figs. 7.1 and 7.2)

All participants in the study were attending CAMHS and were referred to the DBT-A programme by a member of the community mental health team.

Prior to starting the programme, all clients engaged in 1-6 pre-treatment sessions (M = 2.8) with their DBT therapist.

Figure 7.1 CAMHS Participants: Gender



7.4 OUTCOME MEASURES

As with adult participants, measures were selected and compiled based on the four treatment targets of DBT. An outline of the measures used is contained in Section 5.6.1 and Table 5.1.

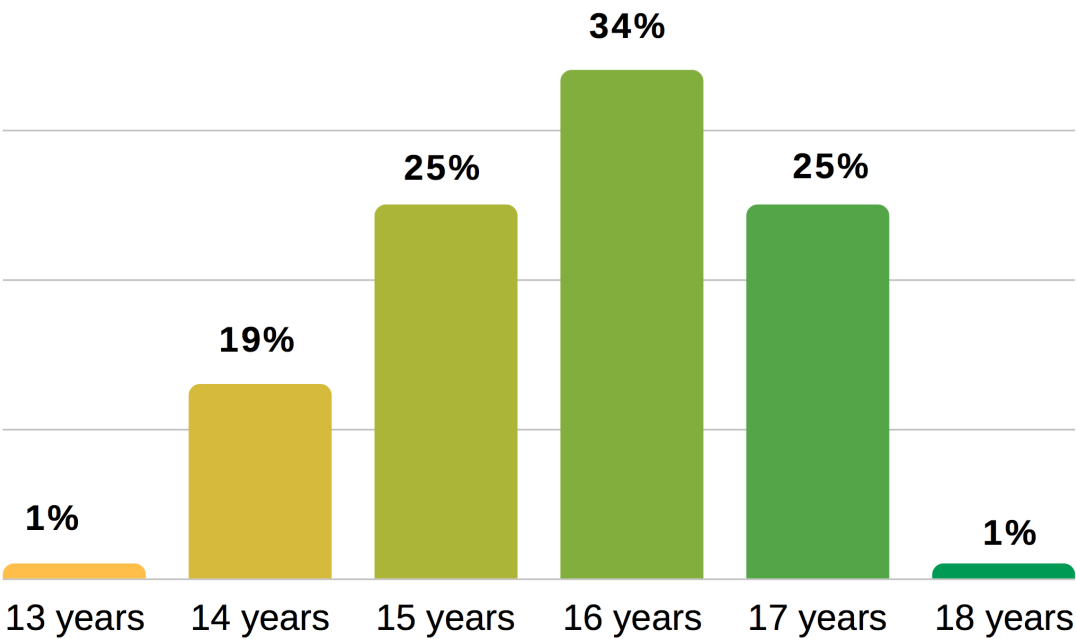
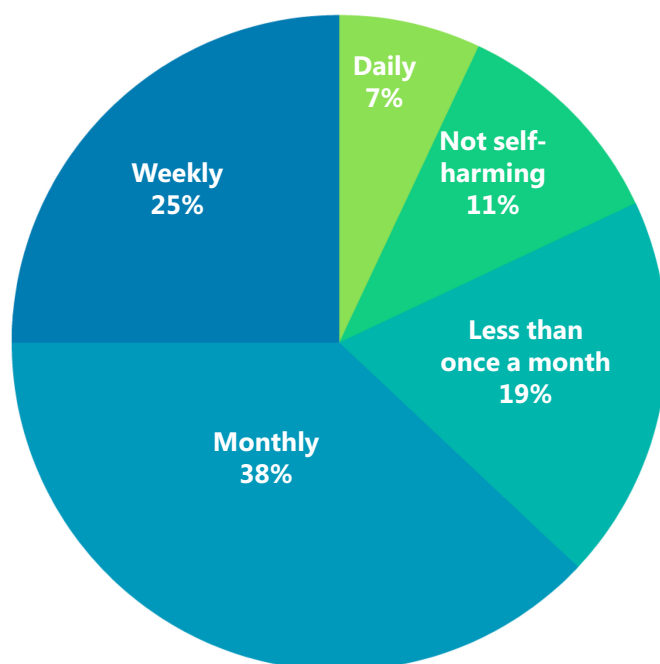
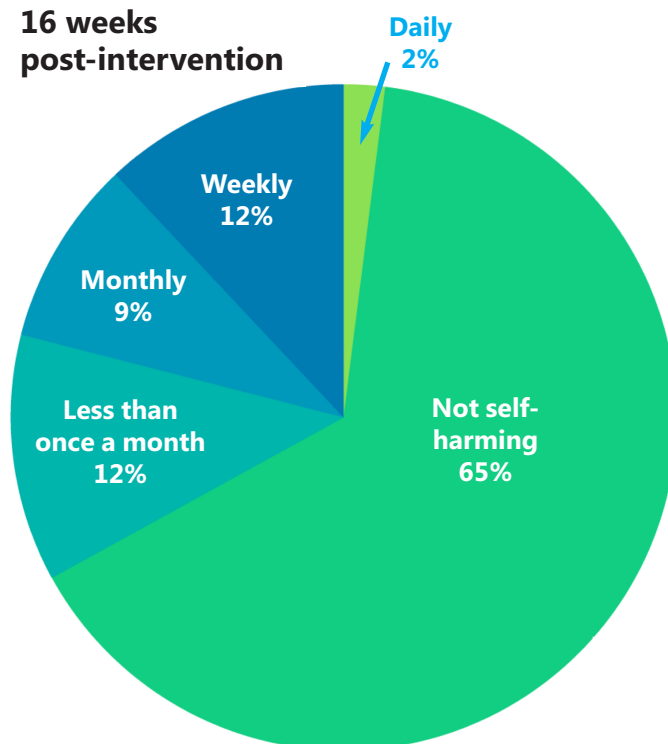


Figure 7.2 CAMHS Participants: Age

16 weeks pre-intervention**Figure 7.3 CAMHS Participants: Frequency of self-harm 16 weeks pre-intervention****16 weeks post-intervention****Figure 7.4 CAMHS Participants: Frequency of self-harm 16 weeks post-intervention**

7.5 DROP OUT AND ATTRITION

Of the 84 participants, 71 participants completed the programme yielding a 15.4% drop-out rate. Reasons for drop-out included the 4-miss rule, commitment difficulties and participants taking a therapeutic break.

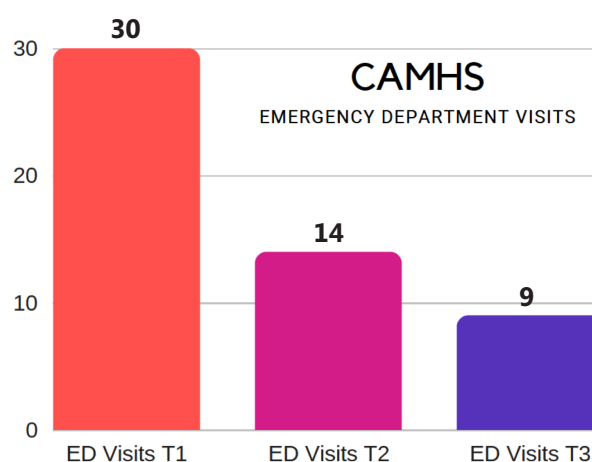
7.6 RESULTS

Significant improvements in borderline symptoms, depression, suicidal ideation and trait anger were observed for DBT-A participants across the seven sites over the course of the intervention [105]. These changes were maintained or further improved at follow-up.

There was a statistically significant decrease in the proportion of participants engaging in self-harm and frequency of self-harm, as reported by DBT therapists, from T1 to T2 and a further significant decrease from T2 to T3 (see Figures 7.3 and 7.4).

These changes were maintained or further improved at follow-up.

Substantial reductions in health service utilisation were also observed, with decreases in emergency department visits (Figure 7.5), acute inpatient admissions (Figure 7.6) and corresponding bed days (Figure 7.7). While there was an increase in

**Figure 7.5 CAMHS Emergency Department Visits**

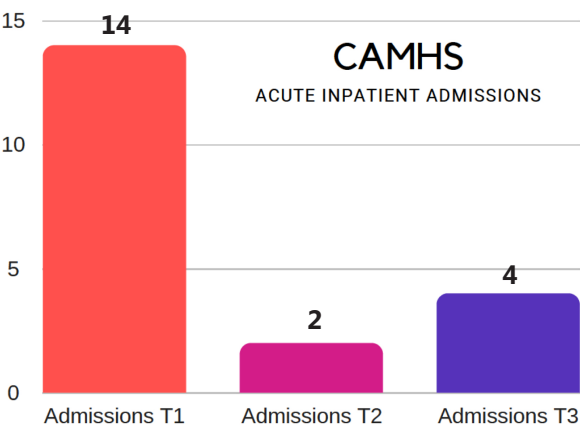


Figure 7.6 CAMHS Acute Inpatient Admissions

inpatient admissions and bed days from T2 to T3, the total number at T3 was still lower than at T1 [105].

At the latter stages of this study, Rathus and Miller (106) published an updated manual suggesting an increase of skills training sessions to 24 weeks to provide sufficient time to adequately cover the material. A comparison of 16-week and 24-week programmes is currently being evaluated by the National DBT Project team.

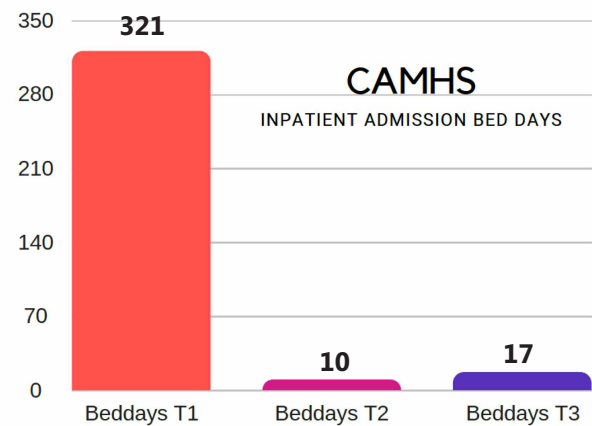


Figure 7.7 CAMHS Bed days -Inpatient Admissions

7.7 PARENT/GUARDIAN OF ADOLESCENT

As part of DBT-A, parents attend the weekly skills group with their child as part of the multifamily group component of the programme but do not receive any therapeutic treatment themselves.

The outcomes and experiences of a total of 100 parent/guardians who participated in 16 week DBT-A programmes were explored.

Self-report measures were completed at pre- and post-intervention, and at 16 week follow-up. Qualitative written feedback about their experiences of the programme was also obtained at post-intervention.

7.7.1 Results

There were significant decreases on all outcome measures including objective burden, subjective burden, grief and parental stress from pre- to post-intervention. These gains were maintained or further improved at follow-up.

Mindfulness, Meeting Others in Similar Situations, and Skill Development were identified as the most helpful aspects of the programme.

The current study highlights the potential benefits of skills training for parents who participate in DBT-A with their child. Future studies will help determine how to best measure change for parents including controlled comparison groups and how to optimise interventions for parents of young people with emotional and behavioural dysregulation [107].

“ I feel DBT has helped me mature a lot
and to problem solve and compromise
easier. ”

DBT CAMHS programme participant



*“ Behaviour is always valid in some way.
It is a therapists job to understand this. ”*

- Alan Fruzzetti PhD, Harvard Medical School

CHAPTER EIGHT

Coordinated Implementation Therapist Experience

Overview: As part of the comprehensive evaluation of the implementation of DBT in Ireland, the *National DBT Project Ireland* therapists, who took part in the coordinated implementation, reported on their experience of barriers, facilitators and challenges to local implementation.

8.1 RATIONALE

As outlined in Chapter Five, a comprehensive evaluation of the implementation of DBT in Ireland was conducted for the National DBT Project, Ireland.

For the purpose of this report, an overview of data collected from DBT therapists regarding their experiences of participating in a coordinated implementation project will be presented. This will focus on therapists' experience of the coordinated implementation with regard to: general support, training, supervision, and barriers/challenges to local implementation.

Surveys were administered to therapists at three time points: prior to attending Intensive Training Part I, 6 months after the start of their first DBT programme, and 2 years following Intensive Training Part I.

8.2 PARTICIPANTS

All therapists who received DBT training as part of the *National DBT Project, Ireland* were invited to participate in the study. The structure of DBT teams was outlined in Section 3.2.1.

Of the 59 therapists trained as part of the year 1 cohort, 46 responded to the survey and of the 64 therapists trained as part of the year 2 cohort, 48 therapists responded. A total of 94 participants were therefore included in the analysis of implementation survey data.

8.3 OUTCOME MEASURES

Therapists' experiences of the coordinated implementation were measured through surveys which were developed based on international DBT implementation research. Survey questions covered areas such as: training, supervision, implementation facilitators and barriers, and experience of coordinated implementation. Data presented here focuses on surveys completed at 2 years following Intensive Training Part I

8.4 RESULTS

Therapists provided positive feedback about the co-ordination and planning support they received from the coordinating team.

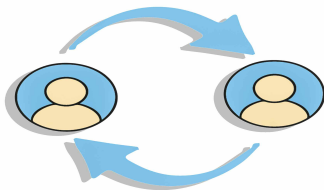
Content analyses on the survey data provided by DBT therapists were carried out by the project research team.

Table 8.1 Response to therapist feedback

THERAPISTS SAID	WE HEARD	WE DID
Links with Senior Service Management	Importance of formal links with management	Tele-conference with all Service Managers and contract sign-off to avail of training
Team Leader support and guidance	The importance of supporting DBT Champions/Sustaining commitment	2 days Team Leader training and Network Group meeting (Jan 2016)
Pre-training meetings/sharing of experience	Need for guidance from those more advanced in experience	Year 1 teams presenting to Year 2 teams on experiences/challenges. Mandatory orientation meetings before training. Reading list of guidance documents on establishing DBT team
Advanced training on consultation and early access to supervision support	The value of support on establishing and maintaining strong adherent teams	Provision of supervision immediately on completing part 1 training / feedback to training providers

Areas where therapists felt they required further support were with regard to senior management support, team leader training and guidance, further links with existing teams and earlier access to supervision.

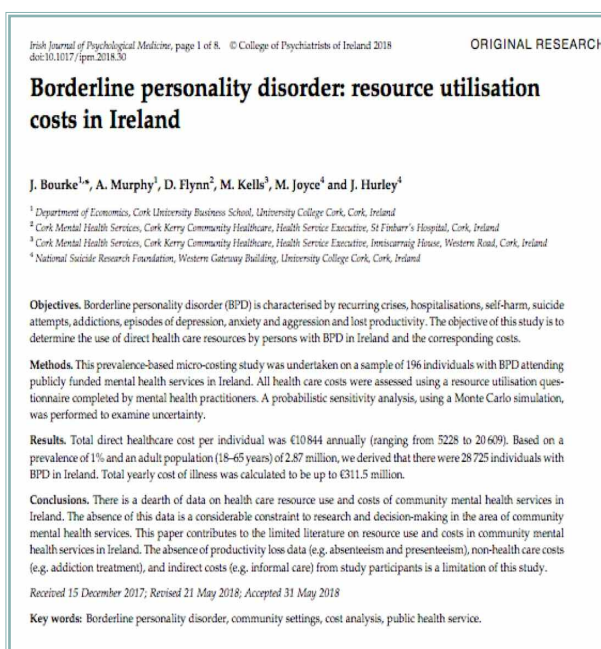
Table 8.1 presents an overview of the feedback that was received from therapists and how the coordinating office sought to incorporate the feedback for the following cohort of teams to train with the National DBT Project Ireland.



CHAPTER NINE

Economic Evaluation

Overview: An economic evaluation comprising a cost analysis of treating BPD and a cost effectiveness analysis of DBT compared to no DBT in the Irish public health system was conducted by health economists in conjunction with the National DBT Project Ireland.



9.1 RATIONALE

An economic evaluation was undertaken to determine the cost effectiveness of the DBT programme compared to no DBT for individuals with BPD. Cost analyses were performed to estimate the cost of the DBT programme and resource utilisation pre, during and post the DBT programme. Effectiveness of the DBT programmes was measured using Quality Adjusted Life Years (QALYs). Pre-programme estimates were employed as the costs and effectiveness of the comparator (no DBT).

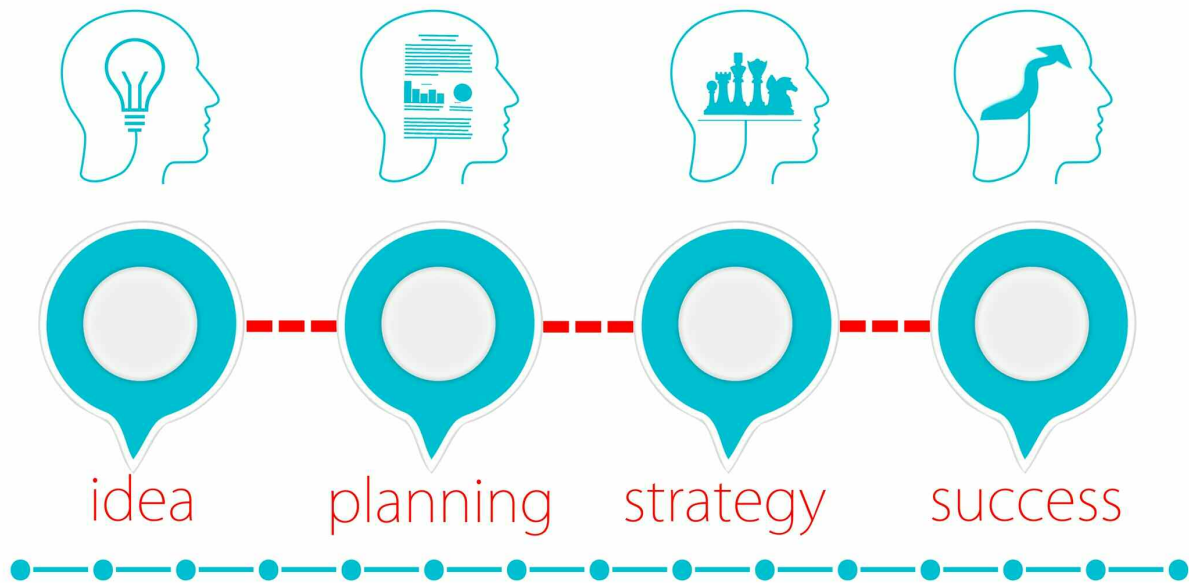
9.2 COST ANALYSIS OF TREATING BPD

Information on healthcare resource use was collected from a sample of 196 individuals who engage with mental health services and were identified as having BPD. Information on medication usage, as well as healthcare services utilized in an acute and community setting was collected. A cost analysis was performed to estimate the cost of this resource utilisation. Results reveal average annual costs of €10,844 per individual [69].

9.3 COST ANALYSIS OF TREATING BPD WITH DBT

A cost analysis of the DBT programme reveals the direct cost of DBT per participant is €10,511 for the intervention duration. This includes training costs (€844), supervision costs (€140) and programme delivery (€9,487) per participant. Programme delivery includes 1.5 days of a therapists time for 48 weeks (duration of programme). The costs associated with programme delivery are time limited.

Data on health care resource utilisation was analysed to investigate health care resource use whilst receiving DBT (in addition to the programme costs). An analysis of resource use data reveals that while receiving DBT, annual health care utilisation



decreases from €10,844 to €3,809 on average per individual. In the 6 months post DBT, average health care utilisation further decreases to €1,663.

Assuming these gains are maintained, the annual average costs decrease from €10,844 prior to DBT to €3326 post DBT.

9.4 COST EFFECTIVENESS ANALYSIS OF DBT COMPARED TO NO DBT

A cost utility analysis was performed to investigate the cost effectiveness of DBT compared to no DBT. Here, data on costs and effects (measured as Quality Adjusted Life Years (QALYs)) from the National DBT Project are employed.

The economic evaluation finds that DBT is less expensive and more effective than no DBT per participant. Therefore, DBT can be considered cost effective compared to no DBT for managing borderline personality disorder for the duration of the programme (one year) and one year follow-up. The probability of DBT being cost-effective is 72%.

Scenario analyses demonstrate that when varying the probability of maintaining DBT programme outcomes, DBT continues to be cost effective compared to no DBT at 3, 5 and 10 years. The probability of DBT being cost-effective at 10 years is 79%.

“ Families matter...
Who stays the road
with the people
who suffer
with this disorder?

It's the family members. ”

Professor Mary Zanarini.
Harvard Medical School

“ ‘The U&ME-A programme has changed my life. I feel my life is only beginning. For the first time in my life, I am happy to be me. I never dreamed I would be able to say this. The skills which I have learned have given me the freedom to be me. The gratitude that I have for U&ME-A and the course coordinators is huge...I will be forever grateful for the life you have given me. Thank you. ”

U&ME-A programme participant

CHAPTER TEN

Adapted DBT for other Populations

Overview: Prior to, and in particular since the establishment of the *National DBT Project Ireland*, a number of adaptations to the standard 12-month DBT programme for specific client groups who are attending Mental Health Services have been piloted.

From offering DBT adaptations and additional treatment beyond the standard programme (e.g. GLOW), to DBT informed programmes for non-clinical groups (e.g. family members), and then moving from intervention to prevention (e.g. in secondary schools), this chapter provides details and preliminary findings on such programmes which fall under the umbrella of the National DBT Project Ireland.

10.1 DBT SKILLS-ONLY INTERVENTIONS

A number of DBT adaptations have been developed to provide treatments for distinct client populations as well as within distinct settings.

One such adaptation has been a shorter skills-only based programme [108,109]. In contrast to 'standard' DBT, DBT skills-only (DBT-ST) programmes provide group skills training only and clients do not receive DBT based individual therapy or phone coaching [110–112].

10.1.1 Understanding and Managing Emotions (U&ME - Cork Pilot Programme)

DBT skills-only adaptations for individuals with BPD as well as for individuals with Axis I disorders who experience emotional dysregulation have shown a number of positive outcomes including reduced drop-out rates, reduced general psychiatric symptoms, improved quality of life, improved affective control and improved mindfulness efficacy [113–115].

The growing evidence base for skills-only adaptations suggests that such interventions may ameliorate some symptoms of emotional dysregulation, in addition to obtaining other positive outcomes for individuals who do not meet criteria for participation in a 'standard' DBT programme.

With this in mind, a DBT skills-only pilot programme, called Understanding and Managing Emotions (U&ME), was established in Cork North Lee AMHS to provide DBT skills training to individuals who experience emotional dysregulation but are not actively engaged in self-harm behaviours.

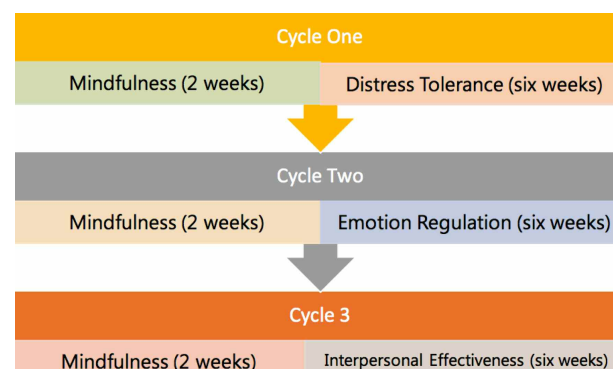


Figure 10.1: U&ME 24 week Programme content

The U&ME programme is delivered over a 24-week period in blocks of three eight-week cycles (Figure 10.1). Mindfulness is taught in the first two weeks of each cycle, followed by six weeks each of distress tolerance, emotion regulation and interpersonal effectiveness. The aim of the programme is to teach participants both acceptance-based skills (mindfulness and distress tolerance), and change-based skills (emotion regulation and interpersonal effectiveness).

Participants' progress is assessed through measures which examine mindfulness, difficulties in emotion regulation and DBT skill use before, during and after the programme.

Preliminary analyses of the data have found a reduction in reported difficulties with emotion regulation, while increases in both mindfulness and DBT skill use have been reported for participants at the end of the programme. The current findings provide preliminary evidence which demonstrates the effectiveness of a DBT skills-only programme for individuals who are emotionally dysregulated but who are not actively self-harming.

Following this successful pilot programme in Cork North Lee AMHS, DBT-ST is now available in Waterford, Galway, Dublin and Wexford and new groups are planned for Limerick, Cavan/Monaghan and Longford/Westmeath in the coming months.

10.1.2 Understanding and Managing Emotions - Addiction (U&ME-A – Cork pilot programme)

There is limited research on standard DBT for substance users, however it has been suggested that DBT-ST adaptations for individuals with both substance use and emotional problems may be effective.

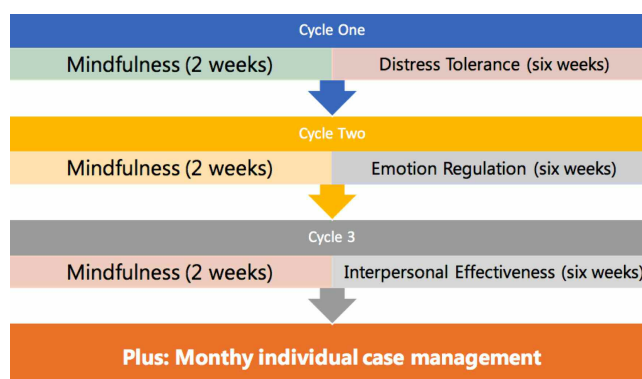


Figure 10.2: U&ME-A 24 week Programme content

Several randomised controlled trials have shown a number of positive outcomes including a reduction in substance use severity, frequency and use, negative mood regulation, sustained improvement and increased behavioural control [116–118]. Non-randomised studies have also shown improvements in general well-being, distress tolerance and emotional regulation enhancement. Further, it was found that DBT-ST adapted for substance use increased the effectiveness of pharmacotherapy and was more effective than cognitive therapy. [119,120].

Following early positive feedback from the Cork North Lee AMHS pilot of the U&ME programme, a pilot Understanding and Managing Emotions – Addiction (U&ME-A) programme was adapted for individuals who have a dual diagnosis of mental health difficulties and substance misuse to make it more relevant and target specific difficulties for individuals who have a dual diagnosis.

Like U&ME, U&ME-A is delivered over a 24-week period in blocks of three eight-week cycles which teach mindfulness in the first two weeks of each cycle, followed by six weeks each of distress tolerance, emotion regulation and interpersonal effectiveness. However, U&ME-A includes monthly individual case management, in contrast to U&ME which is a group skills programme only (Figure 10.2).

To date, feedback from both therapists and clients who participated in U&Me-A has reported benefits. A programme evaluation of measures collected pre and post intervention found significant reductions in alcohol and substance use, dysfunctional coping and emotion dysregulation and significant increases in mindfulness and DBT skill use. These changes were sustained following programme completion.

10.2 DBT-INFORMED PROGRAMMES FOR EARLY INTERVENTION AND TREATING SYSTEMS

10.2.1 FAMILY CONNECTIONS: DBT-informed programme for Family Members

BPD is challenging for family members who are often required to fulfil multiple roles such as those of advocate, caregiver, coach and guardian. Carers of those with BPD, whether related or unrelated, show higher levels of psychological and somatic distress than the general population [121-123].

In addition, carers of individuals with BPD sometimes experience challenges and discrimination when attempting to engage with health services, express dissatisfaction with their lack of involvement regarding patient discharge and support and, in general, do not feel valued, included or educated in treatment pathways.

Family Connections (FC), is a programme based on DBT principles, which was developed for relatives of individuals with BPD in an effort to meet the considerable need of this often overlooked population. The FC programme is a 12-session programme typically delivered in community settings for multiple family members /significant others of individuals with BPD and focuses on:

- Current information and research on BPD and family functioning
- Individual coping and family skills training
- Group support via shared experience with other group members (Figure 10.3).

The FC programme was originally developed and delivered in the United States, and was first offered in the Republic of Ireland in Cork in 2011.

To evaluate the FC programme, data was collected from 80 participants representing 53 families over a four-year period. Participants were assessed on their levels of burden, grief, depression and mastery before and after the programme.

Significant reductions on burden, grief and depression were found for participants who completed FC. A significant increase in mastery was also reported. Improvements were maintained three months following completion of the programme and were maintained at long term follow-up [124].

In supporting family members through programmes such as FC, it is anticipated that changes among family members may not only help the individual themselves, but may also be helpful to reinforce skilful behaviour of their loved one with BPD.

FC programmes now run in Cork, Galway, Wexford, Louth and Meath.

Family Connections: 12 Sessions			
Setting: Community	Current information and research on BPD and family functioning	Individual coping and family skills training	Group support via shared experience with other group members
Participants: Family members/ significant others of individuals with BPD.			

Figure 10.3: Family Connections Programme

Training and expansion

Mr Daniel Flynn and Dr Mary Kells, from the National DBT Project, have undergone training with Professor Alan Fruzzetti and Dr Perry Hoffman, the programme originators and thus can now deliver FC training in Ireland. It is hoped that this will help to develop the FC offering to include all areas in Ireland where DBT is currently available.

DVD and online resource



A DVD and online teaching resource titled **Open Your Mind Before You Open Your Mouth** was developed by the Cork North Lee AMHS service, in association with Professor Alan Fruzzetti, to further refine and enhance skills learning for family members/ significant others and to facilitate the sharing of their learning with extended family and friends.

This resource is available to all participants involved in the Family Connections Programme. The six module DVD is also available as an online resource and includes the following:

Module 1: Introduction

Module 2: Family Education

Module 3: Relationship Mindfulness Skills

Module 4: Family Environment Skills

Module 5: Validation Skills

Module 6: Problem Management Skills

Open your mind before you open your mouth

All modules: www.dbt.ie->Family Information

10.2.2 Clinician Connections



Clinician Connections is a programme that was developed and piloted in Cork Mental Health Service in early 2017 in response to multiple requests for specific training for clinicians who routinely work with clients presenting with severe emotion dysregulation. This was within a context of recognition that working with severely emotionally dysregulated clients in the absence of an appropriate theoretical model was unlikely to be effective, and often had a negative impact on staff well-being.

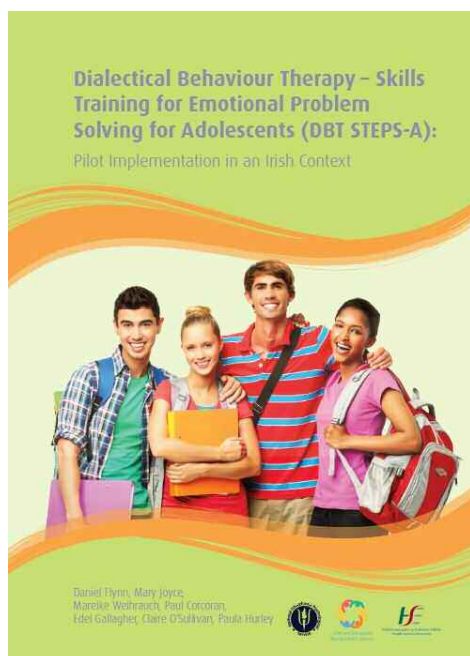
Clinician Connections was derived from Family Connections. However, as Clinician Connections is targeted at practising mental health professionals, the material is covered over a seven hour workshop. Parallel versions of the Family Connections modules with most applicability to clinicians were developed.

Specifically, Clinician Connections includes the following modules: Understanding Emotion Dysregulation; Relationship Mindfulness; Validation Skills and Problem Management Skills. All modules were adapted so that the focus was on the treatment system rather than on the family.

The clinicians delivering the programme are Clinician Connections leaders and trainers and made content based decisions based on clinical experience.

An evaluation of the pilot programme found it to be very effective in skills acquisition and clinicians noted improved client interactions and client relationships resulting from the use of validation. As a result further training for Emergency Department personnel and Junior Doctors is scheduled for 2019.

10.2.3 DBT STEPS-A: Schools-based DBT Intervention



Dialectical Behaviour Therapy Skills Training for Emotional Problem Solving for Adolescents (DBT STEPS-A) [125] is a social-emotional learning programme based on DBT. DBT STEPS-A was originally developed in the United States. An adapted version of this programme was piloted in schools across Cork city and county during the academic year 2015/16.

The school environment is often identified as an appropriate setting for accessing young people where preventative skills against future problems can be taught to the general school body and 'at risk' children can be identified for more specialised intervention or onward referral [126,127].

Guidelines for mental health promotion and suicide prevention in Irish post-primary schools also recommend that schools adopt a whole school approach to mental health. This involves an holistic integrated approach where schools and community partners work together to support positive mental health for young people.

DBT STEPS-A aims to teach adolescents aged 12- 19 years in a general school-based setting skills that will aid them with their decision-making and coping strategies, especially when experiencing emotionally stressful times.

The programme is delivered by teachers in post-primary schools over the academic year (30 weekly classes). The standard curriculum of DBT STEPS-A is delivered to the universal student population. If risk is identified, a student can be referred to specialist services as required (e.g. the National Educational Psychology Service, Child and Adolescent Mental Health Services).

Data was collected from 479 students across nine schools who participated in an evaluation of the programme. As various amounts of the programme were delivered across the nine schools, data was extracted for two schools where the full intervention was compared with a control group who received no intervention. Students were assessed on their emotion symptoms, dysfunctional coping and DBT skill use before and after the programme.

Significant reductions on measures which assess constructs including depression, anxiety and social stress were found for the intervention group [128].

The results suggest that DBT STEPS-A may yield positive effects for adolescents who complete the intervention.

Feedback from adolescents and teachers suggests that refinement of content, structure and implementation may make the programme more accessible to an adolescent population.

10.3 THIRD STAGE DBT PROGRAMMES

10.3.1 GOALS FOR LIFE: OPTING FOR WELLNESS (GLOW): Follow-up Coaching for DBT Programme Completers



DBT is theoretically conceptualised as a treatment which occurs in four stages [37]:

- Stage 1 focuses on behaviour stabilisation;
- Stage 2 focuses on treating trauma and 'quiet desperation'
- Stage 3 addresses 'ordinary happiness and unhappiness' and the problems of everyday living
- Stage 4 targets the achievement of transcendence and building a capacity for joy

In practice, DBT is typically used synonymously with Stages 1 and 2 and Stages 1 and 2 of DBT are typically offered in Community Mental Health Services across the Republic of Ireland. For the most part, input beyond Stage 2 is beyond the scope of publically funded health services.

However, as part of this project, a follow-up programme was developed for behaviourally stable participants with BPD who had completed a DBT programme in Cork. As there are strong conceptual and clinical similarities between DBT and mindfulness-based cognitive-behavioural coaching psychology, this was the coaching model chosen for the intervention.

The four month programme comprised one

individual two-hour session per month and a group activity with all participants at the end of the programme.

Eight people were enrolled in the four-month pilot programme in Cork and were evaluated at two time-points, one at course commencement and one at course completion. Seven people completed the course and completed questionnaires at both timepoints; five participants took part in 20 minute follow up interviews.

Participants indicated that the course was very beneficial for participants who were ready to move on to a coaching programme and who formed a positive connection with the coach. For participants who did not feel ready and who did not make a connection with the coach, the results were less positive. In addition, participants would have liked more group sessions and regular one to one sessions throughout the course duration as most found shared learning and experience very beneficial.

While it is acknowledged that no definitive opinion can be formed from a small sample without further study, it was felt that this pilot programme did offer interesting insights. The learning from this small study suggests that coaches should be given training in the particular issues relevant to BPD prior to running such programme. There is a necessity for clear information during initial induction, take home course materials and the opportunity to add more group and one-to-one sessions.

As of September 2018, a revised GLOW programme incorporating the recommended changes is being developed and will be rolled out in 2019. Participating coaches will take part in Clinicians Connections training.

Conclusion

In summary, research conducted by the National DBT Project Ireland found DBT to be both clinically effective and cost effective. The implementation protocol developed for this coordinated roll-out was successful, with all teams delivering a uniform quality of service and comparable outcomes.

Analyses of the programme to date have found that in the long term DBT has therapeutic and cost benefits.

Highlights include:

- Significant reductions in self harm over the course of the intervention for both adults and adolescents who complete DBT.
- Gains in quality of life and recovery that were maintained six months post programme completion.
- Significant reductions in health service resource use, with 90-95% reductions in inpatient bed days for adults and adolescents who complete DBT.
- The economic evaluation identified that DBT is less expensive and more effective than no DBT per participant, with a cost effectiveness of 72% for the duration of the programme and one year follow-up.
- The cost effectiveness of DBT continues to increase over time and it is estimated to be 79% cost effective at 10 years using economic scenario analysis.
- Therapists who complete DBT training not only offer the treatment to individuals with emotion dysregulation and meeting criteria for BPD, but can also adapt this model for work with other client groups e.g. people with addiction and people with anxiety and mood difficulties.
- Twenty-three teams have trained through the National DBT Project, bringing the current number of DBT teams established in community services in Ireland to 34 representing 54% national coverage.
- DBT teams who have trained with the National DBT project have begun delivery of DBT adaptations including skills only groups and interventions for family members and clinicians.
- A DBT informed programme has been delivered in secondary schools in Cork with positive outcomes for adolescents. This work resulted from a collaboration between HSE Mental Health, Health Promotion and the National Education Psychology service with support of NOSP.

DBT is a valuable talk therapy currently offered in eleven counties in Ireland via public mental health services. Recommendations for next steps would be to minimise team attrition and encourage a full-service offering including adaptations in areas that currently have DBT teams in place.

In the future, it is hoped that a continued expansion of the DBT offering will be considered as part of the National Clinical Programme: Standard Availability of Talk Therapies in Mental Health Services.

For further information, please contact:

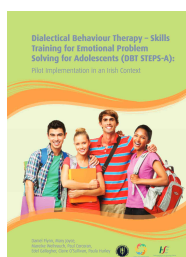
The National DBT Project Office,
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Website: www.dbt.ie

Publications



Flynn, D, Joyce, M, Weihrauch, M, Corcoran, P, Gallagher, E, O'Sullivan, C, and P Hurley. 2017. *Dialectical Behaviour Therapy Skills Training for Emotional Problem Solving for Adolescents (DBT STEPS-A): Pilot Implementation in an Irish Context*. Dublin: HSE.



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