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Perspective Piece

Dialectical behaviour therapy: effect of a coordinated implementation approach on programme sustainability

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Abstract

Sustainability of DBT programmes and the factors which potentially influence this has received little attention from researchers. In this article, we review the literature reporting on sustainability of DBT programmes in outpatient settings. We also seek to advance the limited knowledge on this topic by reporting on the sustainability of DBT programmes delivered by teams that trained via a coordinated implementation approach in Ireland. As part of this perspective piece we conducted a systematic literature search which identified four studies reporting on DBT programme sustainability. All four reported on programmes delivered by teams that had received training as per the DBT Intensive Training Model. The findings of these studies are summarised and we consider the effect on DBT programme sustainability of introducing a coordinated implementation approach in Ireland.

Keywords: Community mental health service; dialectical behaviour therapy; implementation; outpatient; programme sustainability

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Introduction

Dialectical behaviour therapy (DBT) is a comprehensive behavioural treatment which was initially formulated as an intervention for individuals with borderline personality disorder (BPD) and a history of chronic suicidality (Linehan, 1993). Numerous trials have demonstrated both efficacy and effectiveness of DBT for individuals with BPD and other mental health disorders in terms of reduced BPD severity, self-harming behaviours, and related symptomatology (e.g. Stiglmayr et al., 2014; Storebø et al., 2020). In recent years, the focus of DBT research has shifted to examine implementation in various clinical settings with a primary aim of identifying barriers and enablers to implementation in routine healthcare settings (e.g. Swales et al., 2012; Carmel et al., 2014; Flynn et al., 2020). Little has been reported however on the sustainability of DBT programmes and the factors which may influence this in real-world settings.

While the concepts of implementation and sustainability are interlinked, it is recommended that a distinction is made between the two (Bowman et al., 2008). We refer to sustainability as 'the continued use of core elements of an intervention and persistent gains in performance as a result of those interventions' (Bowman et al., 2008, p. 8). Given the significant time and cost investment in training clinicians to deliver DBT, long-term sustainability of DBT programmes is an important element for consideration in implementation evaluation.

A brief overview of DBT training methods

Prof. Marsha Linehan, DBT treatment developer, formulated a method of training DBT therapists known as the DBT Intensive Training™ Model (DBT-ITM; Navarro-Haro et al., 2019). The DBT-ITM is a licensed training model and is a well-established, widely used method of training clinicians to deliver DBT which has been adopted internationally (Navarro-Haro et al., 2019; Swales 2010). The DBT-ITM involves two 5-day workshops of training. In the first 5-day workshop (Part 1), teams are taught the principles of establishing a DBT programme and core strategies of the individual therapy component of the treatment. Part 2 typically takes place within eight months of the first week of training. Teams present work on their programmes and receive feedback and expert consultation on both their programme and individual cases. Further teaching is also delivered (Navarro-Haro et al., 2019; Swales 2010). As well as the DBT-ITM, we are aware of service providers in several other countries including Germany, Denmark and Finland that have opted for an in-house DBT training model whereby expertise is developed by clinicians over time with expert guidance and mentorship. However, we could not find any published reports/ studies which detail the structure, or that report on the effectiveness, of these alternative training models.

Sustainability of DBT programmes in community settings

Minimal research has been conducted on DBT programme sustainability in community settings. We conducted a literature

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search on four databases (MEDLINE, PubMed, PsycArticles, PsycInfo) where the title, abstract and subject terms were searched using the following Boolean terms: (dialect* behav* therapy) AND (sustainability). Manual searches of the reference lists of relevant studies were also carried out. We found four studies which report on DBT programme sustainability in community-based settings, all of which refer to programmes delivered by teams that received training as per the DBT-ITM. Two studies were based in the United Kingdom (UK: Swales et al., 2012; King et al., 2018) and reported primarily quantitative data. The other two, qualitative in nature, were based in the United States (US: Quetsch et al., 2020) and Canada (Popowich et al., 2020).

The most extensive of these studies reports on the survivability of UK-based DBT programmes that commenced after national training events between 1995 and April 2007 (Swales et al., 2012). In their study, 'programme survival' refers to DBT programmes that were still active in each location at the time of study follow-up (July 2009), despite changes in personnel (M. Swales, personal communication, July 7, 2021). Of 105 teams that attended training events between 1995 and 2007, 66 (62.8%) were actively running DBT programmes at the time of the study. Just over a third ($n = 39$; 37.1%) had become inactive since attending training (i.e. at some point during the 2–15-year timeframe). Highest programme failure rates were in the second year of the DBT programme (shortly after the full training programme ended) and again in the fifth year. Programmes that sustained for five years were reported as less likely to 'die' (Swales et al., 2012, p. 550). The most commonly reported reasons for ceasing to function were lack of organisational support, high staff turnover and insufficient allocated time to deliver the programme. Their study included data from teams that were based in inpatient as well as outpatient settings.

A follow-up study by the same group reported similar findings in a larger sample of teams ($n = 468$), for which the highest failure rate was again observed in the second year of the programme (King et al., 2018). Additional analyses in that study found that DBT teams that trained off-site were significantly more likely to survive. Early implementers were significantly less likely to survive than late implementers, but a small effect size was reported for this observation so the finding should be interpreted with caution.

The two studies conducted in the US and Canada explored factors which influence sustainability as well as issues experienced by DBT teams after they completed training (Popowich et al., 2020; Quetsch et al., 2020). Broad similarities were found in both studies whereby the factors influencing sustainability were akin to those specific to implementation as reported by Swales et al. (2012) and King et al. (2018). From the perspective of clinicians, barriers to sustainability included systemic challenges such as high rates of staff turnover, conflicts within consultation teams and clinician burnout, particularly in providing DBT programmes without adequate support by the mental health system (Popowich et al., 2020). This was similar to the viewpoint of health administrators who also reported resource concerns as well as staff selection and turnover as barriers to DBT sustainability (Quetsch et al., 2020).

Although the number of studies on this topic is limited, there are some noteworthy findings. Across all four studies, similar barriers to sustainability such as staff turnover and lack of system support were consistently reported by both clinicians and health administrators. The similarity in identified barriers to sustainability from different perspectives (clinicians, health administrators) as well as across jurisdictions (UK, US, Canada) is also worth mentioning. Across the studies, there also appears to be a greater focus on the identification of barriers to sustainability rather than facilitators. The two quantitative studies which looked at long-term survivability of teams both found the second year of the DBT programme to be critical for teams. The five-year mark is also important given that Swales et al. (2012) note that teams who were functioning to that point were more likely to continue to achieve longer term sustainability.

We seek to advance on the limited knowledge on this topic by reporting on the sustainability of DBT programmes delivered by teams that trained via a coordinated approach in the public health system in Ireland. We also review and discuss the outcome of strategies introduced as part of this coordinated approach which aimed to mitigate barriers to implementation and sustainability of DBT programmes in an outpatient setting.

The NDBTPI coordinated approach to training and implementation

In the Republic of Ireland, the DBT-ITM has been the method of training primarily delivered since the first training took place in the early 2000s. In 2013, the National DBT Project Ireland (NDBTPI) was established to coordinate DBT training and implementation at a national level. This coordinated approach was established as a result of multiple independent requests to the public health service for funding to attend DBT training events (Flynn et al., 2018). The NDBTPI was the first to coordinate DBT training at a national level while concurrently attempting to mitigate barriers to implementation and sustainability of teams. During the period December 2013 to May 2015, two cohorts of eight teams (16 in total) completed training in the DBT-ITM via the NDBTPI. The first cohort of teams attended Part 1 of training in December 2013 and completed Part 2 in July 2014. The second cohort began their training in September 2014 and completed in May 2015. As part of the NDBTPI, a coordinating team was established in 2013 and continues to exist presently. DBT teams have continued to liaise with the coordinating team which has facilitated the monitoring of programme sustainability over time.

In line with the quantitative studies conducted by Swales et al. (2012) and King et al. (2018), we assessed sustainability of these DBT programmes by calculating the length of time passed since the first day of training. When examined by individual cohorts, at the time of preparing this manuscript (April 2023), seven of eight cohort 1 teams (87.5%) were active[1] at nine years post-training. The same number of cohort 2 teams were active at eight years post-training. All 16 teams (100%) were sustained beyond the second year of their programme. The two teams that ceased to function did so in the fourth and fifth year of their programme implementation. Reasons for disbandment included systemic issues (e.g. staff recruitment issues, lack of core multi-disciplinary team staff in remote geographic areas) and a lack of forward planning when team members were preparing to leave (e.g. because of staff transfers, retirement).

In the coordinated approach to training and implementation, our team was guided by previous experience of local and regional implementation as well as international research findings when

[1]One of the seven teams considered to be active was offering a Skills Training programme rather than the full DBT programme at the time of study follow-up. While the team could not offer a full programme due to resource limitations at that time, they continued to operate with some core components of DBT (i.e. DBT Skills Training, Team Consultation) in a planned and considered way. We have categorised this team as being active because of their plans to reinstate the full programme when resource issues are rectified.

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considering facilitators and barriers to implementation and sustainability in a publicly funded mental health system (a full list of facilitators and barriers and how they were addressed in this coordinated approach can be found in Flynn et al., 2019). Given the vulnerability of teams in the second year of their programme, training applications set out a requirement of a two-year minimum commitment from each team. A requirement for local and service managers' signatures on the training application form provided evidence of awareness, as well as commitment to a minimum two-year implementation strategy from both DBT and management teams. Orientation meetings and site visits at each team's location prior to training ensured that a clear outline of individual and team level commitment requirements was provided in advance of clinicians availing of this specialist training. We believe that the requirement for local and service management sign-off at the training application stage, in addition to orientation meetings and site visits, were key factors which ensured teams were still active and delivering DBT at two years post-training. Finally, DBT teams were made aware that there would be opportunities to expand their team via Foundational Training events in the second year of their programme. This may have also enhanced the potential for success at the two-year mark. While the listed actions were primarily focused on maximising successful implementation, they also provided a solid foundation for enhancing long-term sustainability.

The second point of vulnerability identified in previous research is in year 5 (Swales et al., 2012). It is suggested that programmes sustained for more than five years are less likely to 'die'. As the data from Irish teams that trained via the NDBTPI coordinated approach extends beyond this timeframe and programmes have now been sustained to years 8 and 9 for the majority of teams, it is possible that there are enhanced benefits in terms of long-term sustainability when a coordinated implementation approach is adopted. In the study by Swales et al. (2012), an overall survivability rate for the 2–15-year timeframe was reported but survivability rates at critical times of years 2 and 5 were not specified. Direct contact with the authors informed us that 80% of programmes in that study survived to 2 years while 58% survived to 5 years (R. Hibbs, personal communication, October 18, 2021). While the number of teams that trained via the coordinated approach referred to here is much fewer than that reported in Swales et al. (2012), the long-term sustainability of programmes delivered by teams that trained via the NDBTPI is indicative of additional benefits when a coordinated implementation approach is applied.

Swales et al. (2012) proposed that reasons for programme failure in year 5 may be more variable than in year 2 but suggest that staff turnover may be a contributing factor. This is corroborated by the work of Popowich et al. (2020) and Quetsch et al. (2020). As part of the coordinated approach, the NDBTPI has continued to fund Foundational Training events as well as expert supervision for teams on an annual basis. We anticipate that these ongoing efforts may counteract factors such as staff turnover which may impede on long-term sustainability of DBT programmes.

Potential benefits of a coordinated implementation approach

In consideration of the evidence presented here, we believe that coordinated efforts for implementation and sustainability are a worthwhile investment. Although the coordinated implementation described here took place within a centrally funded public health service, we believe that this approach may have applicability in other less structured or private models of healthcare. We also think the evaluation of the coordinated implementation approach was an important element which may have had a positive impact on programme implementation and sustainability. Teams that trained via the NDBTPI were not only signing up to avail of training in an evidence-based intervention, they were also part of a wider initiative which involved a comprehensive research evaluation where the findings could help to shape the future direction of DBT in community mental health services nationally. As a result of their participation in the research evaluation, teams were able to avail of interim reports which demonstrated the effectiveness of their individual programmes. Demonstrating clinical effectiveness as well as clinicians' participation in a wider initiative that may influence practice in services may have provided motivation to continue this intensive work. The results of the evaluation also demonstrated and validated the need for continued support and investment to local and area management teams.

We know that two of the 14 teams that are active now were paused for brief periods of time. For both of these teams, contact with the NDBTPI coordinating team was maintained by team members and efforts were made to help re-establish the teams when it was clinically safe to do so (i.e. after training more staff, organisational issues were resolved). While systemic issues wider than the DBT team can pose challenges to sustainability, coordination may provide support with long-term planning and problem-solving that in other instances may result in a team permanently ceasing to function.

Finally, the macro-level oversight provided by the NDBTPI team allowed for an annual review of DBT team needs and staffing deficits. While training events were organised as required after that review, some scheduling challenges persisted. For example, DBT-ITM events need to be scheduled ahead of time and typically occur infrequently in specific geographic areas. The access limits that can occur with annual/ bi-annual training events by an outside training provider presents a case for acquiring more information about the effectiveness of other training models and approaches. Such information could be valuable in identifying if a coordinated approach for the provision of other training models may also achieve success in terms of service provision and long-term sustainability of DBT programmes. Although the implementation referred to in this paper was conducted before the COVID-19 pandemic, the innovations in online DBT delivery imposed upon us by the pandemic may lend themselves to further flexibility in DBT delivery in the longer term. The coordination of training (who, how, where, to what level) will continue to be central to the achievement of DBT sustainability in a post-pandemic era.

Conclusion

The identification of just four previous studies on this topic highlights that DBT sustainability is an under-researched topic. We provided evidence to demonstrate that a coordinated implementation approach can mitigate some barriers to sustainability such as staff turnover and lack of system support. While sustainability was improved with a coordinated approach, some challenges persisted. Further research is needed to identify potential facilitators to long-term sustainability. Finally, all of the studies discussed here reported on sustainability of teams trained via the DBT-ITM. It will be important to study alternative models of training in future research and examine implementation and sustainability outcomes with various training approaches.

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