

Online MBT is less effective than face-to-face MBT – a retrospective casenote study

Dr Daniela Borges, Dr Steve Pearce
Complex Needs Service, Oxford Health NHS Foundation Trust

INTRODUCTION

Borderline personality disorder (BPD) is characterized by impairments in personality functioning, in specific self and interpersonal functioning.¹

Mentalisation based therapy (MBT) was designed to address a difficulty in regulation and understanding of mental states in patients with Borderline Personality disorder.^{2,3}

The **Complex Needs Service (CNS)** in Oxfordshire and Buckinghamshire is a specialist service for patients with long-term mental health difficulties, such as personality disorders. Beyond the provision of other psychotherapy modalities, the service provides a 10-week MBT group with two and a half hour sessions weekly. This service MBT format was previously studied and identified as effective.⁴

The **COVID-19 pandemic in the UK** has led to population-wide restrictions which have affected the provision of patient care in the National Health Service. The CNS had to adapt their provision of psychotherapy by moving from face-to-face to online sessions. Face-to-face MBT groups were initially brought to a close with follow up telephone calls, and later delivered entirely online.

Aim: To compare the impact of different delivery methods of MBT groups on self-reported outcomes and dropouts conditioned by the COVID-19 pandemic restrictions.

METHOD

Data was collected as part of routine clinical care using the Patient Owned Database and clinical notes. 156 subjects invited to participate in MBT groups between October 2019 and August 2020 were included in this study. These were divided into three groups according to delivery method:

- Face-to face (control),
- Hybrid (started face-to-face and concluded their therapy with follow-up phone calls)
- Online.

Outcomes analysed included routine clinical self-reported measures - General Health Questionnaire 12-items version (GHQ-12), Social Functioning Questionnaire (SFQ), Client Satisfaction Questionnaire 8-items version (CSQ), and MacLean Borderline Personality (BPD) screening tool – as well as group attendance dropout.

Statistical analysis was done using SPSS vs 27 and a significance level of 0.05 was applied to all statistical tests.

RESULTS

MBT groups

The waiting time from referral to starting the MBT group was on average 448.2 ± 148.54 days and was different between groups (*Kruskal-Wallis Test, Test statistic 8.602, Sig 0.014*), with the online group recording longer waiting times.

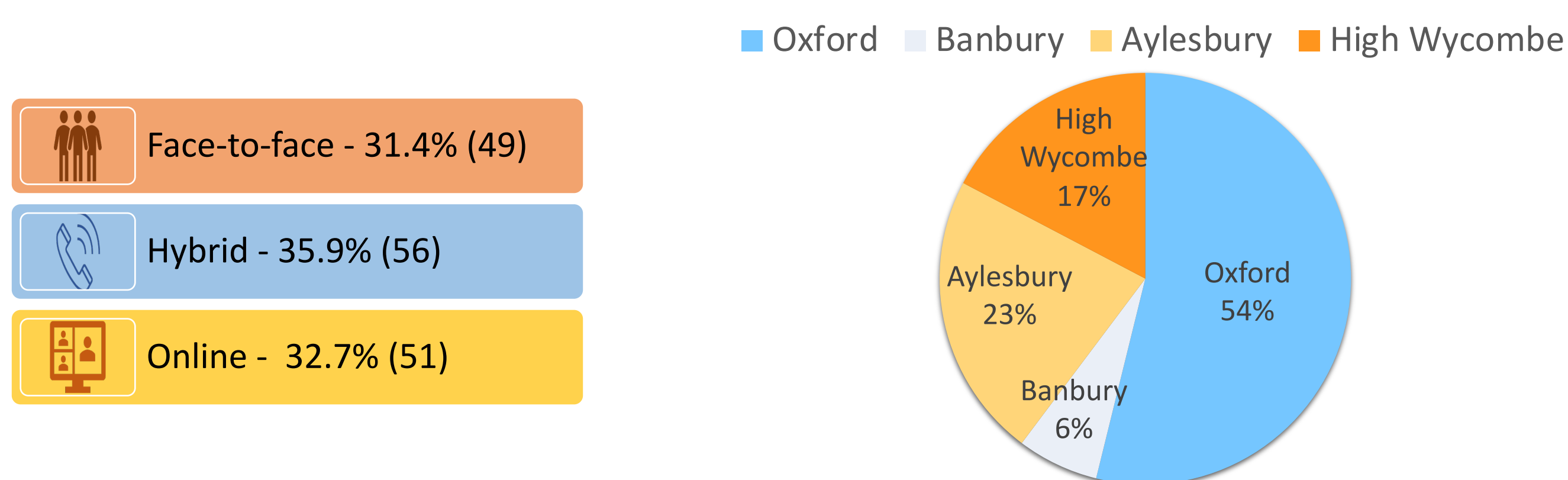
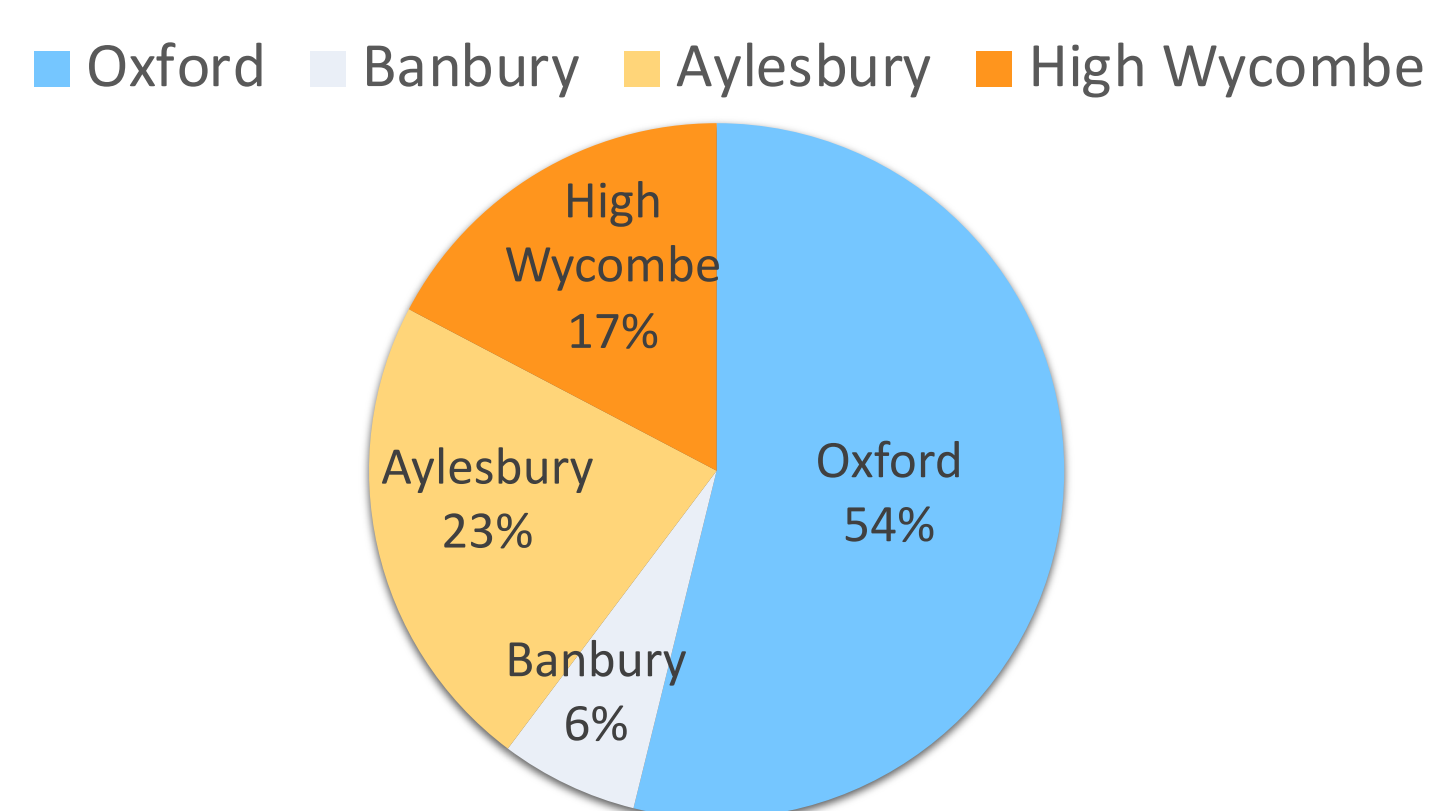


Figure 1: MBT group delivery method distribution

Figure 2: MBT group CNS locality distribution



Time from registration to MBT					
MBT delivery method	n	Mean	SEM ^a	Minimum	Maximum
Face-to-face	49	430.27	152.882	141	1013
Hybrid	56	424.82	127.753	213	798
Online	51	491.00	158.780	80	907

Table 1: Descriptive analysis of time from registration to MBT between different MBT delivery methods
Legend: a. SEM – Standard error of the mean

Demographics

The average age of the cohort was 36.99 ± 11.782 years and 79.5% were female. These demographic variables were not significantly different between groups.

MBT delivery method	n	Age				Gender	
		Mean	SEM ^a	Minimum	Maximum	Females	Males
Face-to-face	49	36.47	11.440	21	60	35	14
Hybrid	56	37.34	12.267	20	62	47	9
Online	51	37.10	11.780	19	61	42	9

Table 2: Descriptive analysis of variables age and gender between different MBT delivery methods
Legend: a. SEM – Standard error of the mean

Self-reported measures

Overall, 80.8% of the cohort completed the baseline questionnaire and 48.1% completed the post-MBT questionnaire.

RESULTS [CONT.]

Pre and post MBT outcomes

Only the control group showed a statistically significant improvement in all outcomes when compared to the baseline. The hybrid group only had a significant improvement of the MacLean score, and only the CSQ score showed improvement for the online group.

	Control (n)	Hybrid (n)	Online (n)	Significant improvement	
GHQ	Score after MBT < before MBT	18	12	11	Only Control
	Score after MBT > before MBT	2	7	8	
	Score after MBT = before MBT	2	2	2	
	Total	22	21	21	
	Statistic test, Sig.	-3.512 ^a , <0.001	-1.188 ^b , 0.245	-1.209 ^b , 0.237	
SFQ	Score after MBT < before MBT	16	13	13	Only Control
	Score after MBT > before MBT	5	8	5	
	Score after MBT = before MBT	2	0	3	
	Total	23	21	21	
	Statistic test, Sig.	3.462 ^a , 0.002	1.164 ^b , 0.258	1.050 ^b , 0.306	
CSQ	Score after MBT < before MBT	7	7	4	Control & Online
	Score after MBT > before MBT	14	13	13	
	Score after MBT = before MBT	1	0	2	
	Total	22	20	19	
	Statistic test, Sig.	-2.874 ^a , 0.009	-1.216 ^b , 0.239	-3.421 ^b , 0.003	
MacLean	Score after MBT < before MBT	13	16	13	Control & Hybrid
	Score after MBT > before MBT	2	5	4	
	Score after MBT = before MBT	7	0	4	
	Total	22	21	21	
	Statistic test, Sig.	-3.089 ^a , 0.001	-2.628 ^b , 0.007	-1.601 ^b , 0.114	

Table 3: Descriptive frequency and statistical test results of standardised mean or median outcome differences before and after MBT for the different MBT delivery method groups. Parametric and non-parametric tests were used according to the group sample distribution.

Legend: a. Wilcoxon Signed Ranks Test Statistics, b. t-test for equality of mean in independent samples

Dropouts

The dropout rate was similar between the three compared groups (*Pearson Chi-square 0.851, Asymptotic Sig 0.654*)

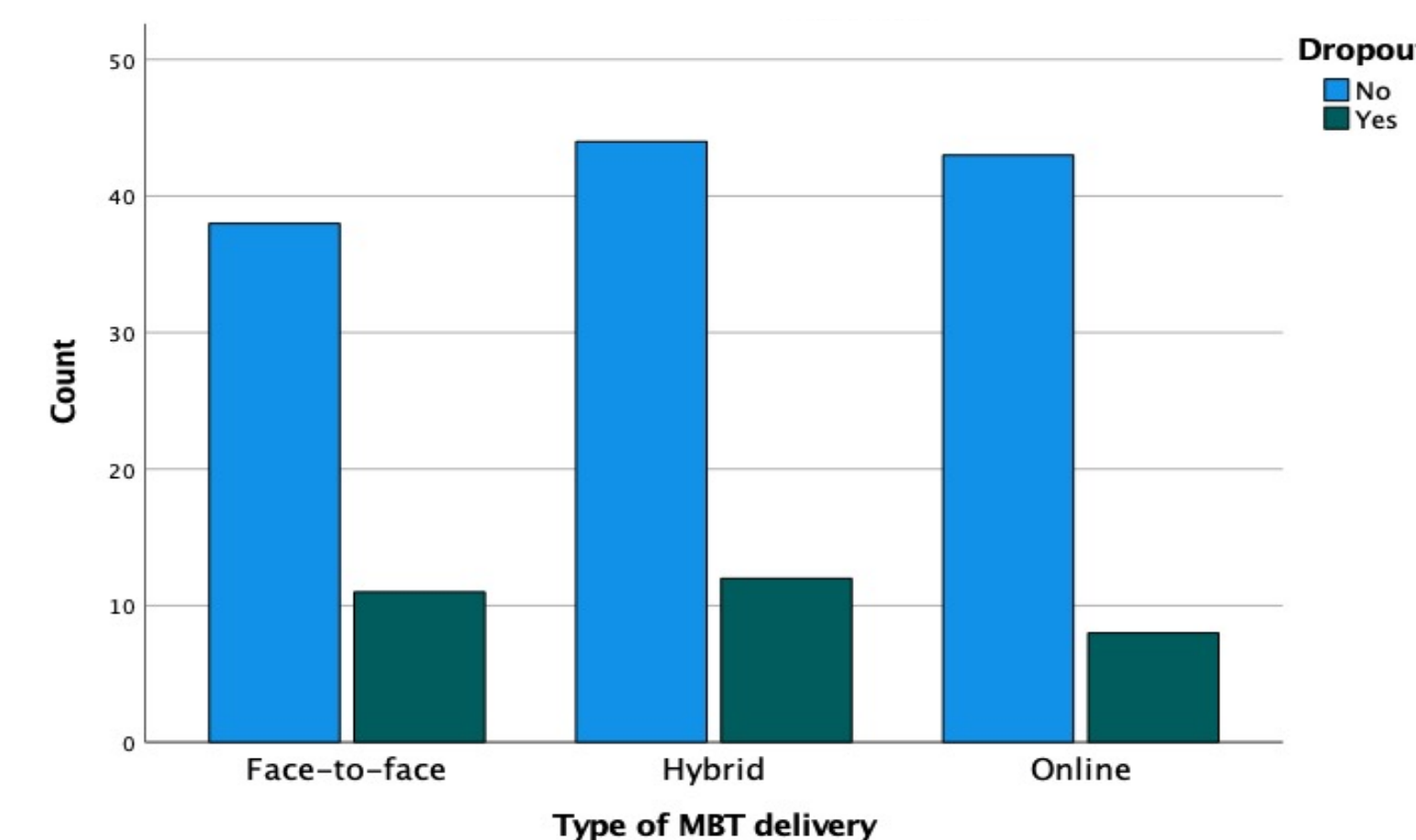


Figure 4: Bar Chart with dropout rates between different delivery MBT delivery methods

DISCUSSION

- These results reflect the outcomes of the first cohorts of patients receiving MBT online in the CNS service. The subgroups were similar in demographics, but not in waiting times for therapy.
- In this study all self-reported outcomes improved in the control group. This contrasts with previous studies in which social functioning did not improve post-MBT, with this being conditioned by baseline function.⁴
- Even though the dropout rate was lower for the online as expected, it was not a statistically significant difference when compared to the control.

Limitations:

- Only 40% of all subjects completed both baseline and post therapy questionnaires
- The study only included self-report questionnaires and did not include other variables such as clinician and third-party views, qualitative feedback, engagement within groups, medication use, comorbidity with other psychiatric disorders, social factors
- Outcomes could be affected by:
 - the significant effect of the COVID-19 pandemic on mental health outcomes⁵ and the high-risk population treated in this service⁶
 - the initial lack of experience delivering therapy online

CONCLUSION

This study provides initial evidence that online delivery of MBT group therapy is less effective than face-to-face therapy and should be further assessed in future studies.

REFERENCES

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (American Psychiatric Association, Washington D.C., 2013)
2. Bateman, A. & Fonagy, P. Effectiveness of partial hospitalization in the treatment of borderline personality disorder: a randomized controlled trial. The American journal of psychiatry 156, 1563–9 (1999).
3. Fonagy, P. Affect Regulation, Mentalization and the Development of the Self. (2018).
4. Syam N, Tutin A, Attwood G, Pearce S, Saunders KEA. Predictors of treatment response following attendance at a mentalisation-based therapy group: an analysis of routinely collected patient outcome data. Poster (2019).
5. Fancourt, Daisy et al. Trajectories of anxiety and depressive symptoms during enforced isolation due to COVID-19 in England: a longitudinal observational study. The Lancet Psychiatry, Volume 8, Issue 2, 141 – 149 (2021)
6. Pierce, Matthias et al. Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. The Lancet Psychiatry, Volume 7, Issue 10, 883 – 892 (2020)