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Relapse and recurrence of common mental health problems after low intensity CBT: The WYLOW longitudinal cohort study

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Depression and anxiety disorders are highly prevalent and relapse-prone conditions.[1-2] Cognitive behavioural therapy (CBT), a well-established psychological intervention, has been shown to reduce the longer-term risk of depression relapse. For example, average relapse rates following CBT (~30%) compare favourably to relapse rates observed after discontinued pharmacotherapy which tend to be upwards of 50%.[3-4] In spite of the effectiveness and durability of CBT for common mental health problems, barriers to its dissemination include the cost of delivery and the scarce availability of specialists in many countries. In order to overcome such barriers, briefer and less costly 'low intensity' forms of CBT (LiCBT) have been developed to guide people on how they could self-manage and overcome their symptoms.[5] LiCBT can be delivered by trained coaches or lay helpers, using a variety of methods including individual, group-based, telephone-based or online support. Meta-analyses of controlled trials support the use of LiCBT for the treatment of acute depression and anxiety symptoms, although there is still inconclusive evidence about its longer-term effects.[6-7] Given its short-term duration (typically < 8 sessions), LiCBT does not typically allow for intensive relapse prevention work or booster sessions that may account for the durability of more intensive CBT interventions.[8] For this reason, prospective follow-up studies are necessary to establish if the effects of LiCBT are as durable as those observed in more conventional CBT interventions. This study reports relapse and recurrence rates in a cohort of patients who completed LiCBT in routine care, and who were followed-up on a monthly basis for up to 2-years post-treatment.

The *West Yorkshire Low Intensity Outcome Watch* (WYLOW) was a prospective, longitudinal cohort study. The study recruited 439 patients with depression and anxiety disorders who completed LiCBT interventions in a

stepped care psychological therapy service linked to the *Improving Access to Psychological Therapies* (IAPT) programme in England. LiCBT interventions were highly standardised, were delivered by trained psychological wellbeing practitioners, and included individual, group and online forms of treatment delivery, consistent with clinical guidelines.[9] Participants were eligible for inclusion if they completed LiCBT with remission of depression and anxiety symptoms, established using diagnostic cut-offs on the PHQ-9[10] and GAD-7[11] measures. Participants were contacted once per month by the research team, and completed these measures to monitor their symptoms for up to 24 months. Cases that met criteria for reliable (>5 points increase) and clinically significant (above diagnostic cut-off) deterioration of symptoms on any of the 2 measures during follow-up were classified as having a risk event. Consistent with previous research,[1-3] a risk event was considered a *relapse* if it occurred within 12 months after treatment, and a *recurrence* if it occurred after 12 months. We performed a survival analysis using Kaplan-Meier (KM) curves to model *time-to-event* in months. KM curves plot the probability of survival (remission) over time, while taking account of censored (i.e., missing) data points.

The sample included a majority of white British (94.2%) female participants (59.7%) with a mean age of 41.28 (SD = 14.59), who on average accessed 7.04 (SD = 1.99) treatment sessions. Mean pre- and post-treatment measures were PHQ-9 = 13.60 (SD = 5.41), 3.44 (SD = 2.40); GAD-7 = 13.20 (SD = 4.38), 3.19 (SD = 2.17). Full details about recruitment, inclusion criteria and methods can be found in a preliminary report of 12-month outcomes.[12] The study was approved by the NHS Health Research Authority (Yorkshire and Humber REC; Ref: 12/YH/0095).

[Figure 1]

Overall, 65.8% (95% CI: 59.3 to 72.2) of cases met criteria for a risk event within the 2-year follow-up period (34.2% remained in remission at 24 months). Figure 1 displays KM survival estimates, plotting the proportion of cases remaining in remission at each monthly measurement point. The figure quantifies cumulative relapse/recurrence rates at 6 (41.7%), 12 (52.8%), and 18 months (59.4%). The steeper inclination of the curve in the left side of the figure indicates that most risk events (77.8%) occurred within the first 6 months post-treatment. Thereafter, 90.6% of events were observed by 12 months and 96.2% at 18 months.

These results indicate that 24 month relapse/recurrence rates (65.8%) after completing LiCBT are twice as high as those observed in controlled trials of high intensity CBT.[3-4] The limited durability of LiCBT for some patients could be related to structural constraints such as the lower number of sessions, or the emphasis on didactic treatment methods. This suggests that halving the length and intensity of treatment may also halve the durability of effects. The first 6 months after treatment should be considered a critical period where the majority (2 out of 3) of relapse-prone cases become apparent. Consistent with earlier studies, we have previously reported that cases that completed therapy with residual depression symptoms (PHQ-9 = 5 to 9) had double the risk of relapse within the first year.[12]

Some limitations in this study concern cases lost to follow-up, and the lack of structured diagnostic interviews to establish if participants met full diagnostic criteria for a mental disorder during the follow-up phase. To deal with the first challenge, we applied *censoring* in survival analysis, which is

appropriate to deal with missing data. Regarding the second problem, we applied a stringent and conservative operational definition of relapse, based on the observation of both statistically reliable and clinically important deterioration in well-established depression and anxiety measures.[10-11]

On balance, the present results indicate that LiCBT can be an effective way to treat the acute symptoms of depression and anxiety disorders, although dedicating time and attention to relapse prevention strategies[3,6] is a clear area for future development. The findings support the notion that, for some individuals, problems like depression are experienced as long-term and recurrent conditions and therefore self-management support should be an important component of psychological care.

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Figure 1. Survival analysis: Kaplan-Meier curves plotting time-to-event