The OnTrack Depression Program: Pilot study of an online treatment for depressive mood and relapse

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Aim

• To pilot test the efficacy of an online intervention for depressive symptoms and relapse.

• To compare the effectiveness of a brief relapse-focused intervention to a longer, CBT+mindfulness-focused intervention in reducing depressive mood and depression relapse.

Background

Depression is one of the most common and debilitating disorders in Australia, with a lifetime population prevalence of 13.5%[1]. Yet less than half of people with 12 month symptoms will access any kind of treatment[1].

Internet-based interventions overcome a number of patient barriers to treatment such as finding skilled clinicians, time required to attend appointments, being geographically isolated from services, and stigma associated with mental illness or discomfort in discussing personal problems.

Australian internet-based programs for depression have shown promising results[2,3], even with minimal support in the form of e-mail reminders[4], or with no support at all[5].

Existing programs focus on recovery from a current episode, but depression is increasingly recognised as a chronic and recurrent illness, with up to 50% of patients treated by specialists not recovering by 6 months and 10% not recovering over 5 years or more[6]. In those who do recover, risk of relapse is 40% or more over 2 years and exceeds 80% over 15 years [6].

OnTrack's Depression Program was developed to target recurrent depression and build skills to prevent future relapse.

Method

Participants self-referred to the program in response to internet or media advertising and were screened for initial eligibility over the phone. If entry criteria were met, participants were invited to complete the full baseline assessment which comprised a 40 minute phone interview and online questionnaires.

Assessments included:

- Demographics
- DASS-21
- SCID for major depressive episodes; current and lifetime
- WHO-QOL Brief
- Medical and psychiatric history
- Treatment expectancy ratings

After assessment was completed, the participant's registration was approved and they were e-mailed personal login details to access the program. Random allocations to the treatment groups were generated automatically by the program and determined which version participants would see upon login. All participants received automatic login reminders after 7, 14 then 30 days of no login.

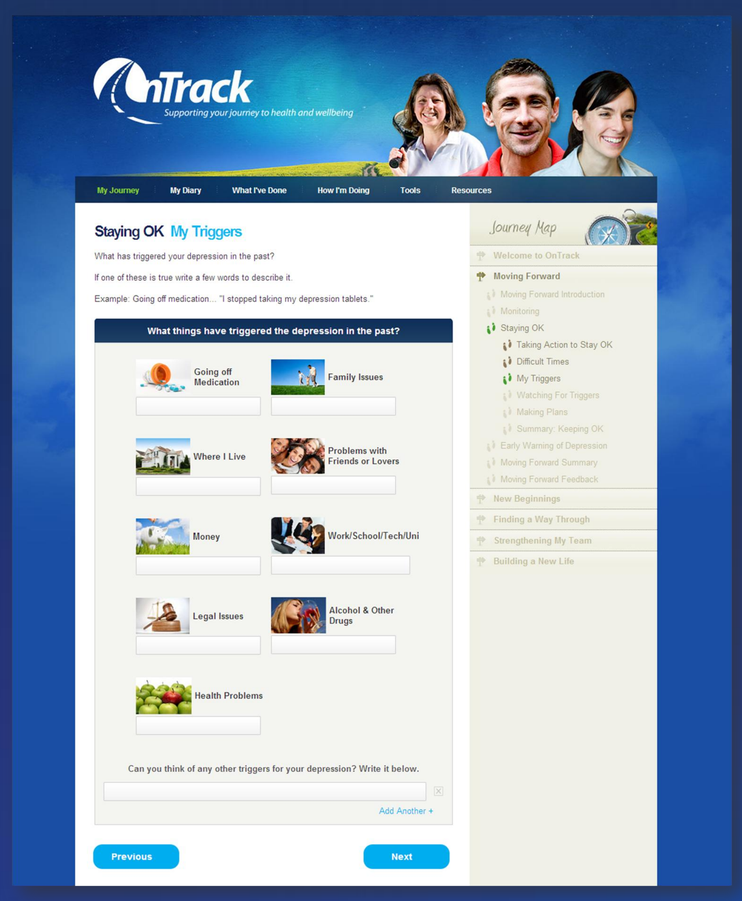
Interventions

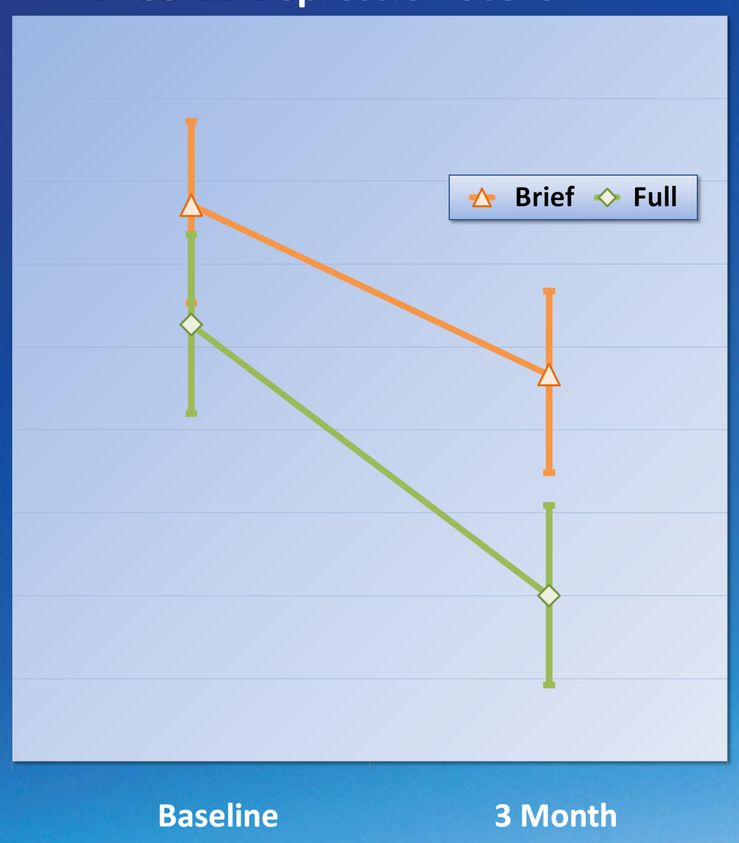
- **Brief Program -** One module covering:
  - Mood monitoring with graphical feedback
  - Identification and planning for depression triggers
  - Identification and planning for early warning signs
- **Full Program -** Five modules covering:
  - Brief Program module
  - Mindfulness, behavioural activation
  - Problem-solving, mindfulness, cognitive restructuring
  - Relationships, mindfulness, dealing with guilt and shame
  - Identifying positive changes, mindfulness, future goals

Sample Characteristics

	Group	N	Mean (SD)	Test
Age (years)	Brief	21	42.90 (13.27)	t = 1.144
	Full	26	38.35 (13.8)	p = 0.259
Gender (females)	Brief	21	16 (76.2%)[a]	χ^2 = 0.281
	Full	26	18 (69.2%)[a]	p = 0.596
DASS Depression subscale	Brief	21	23.43 (9.28)	t = 1.153
	Full	26	20.08 (10.38)	p = 0.255
≥3 MDEs in lifetime	Brief	21	16 (76.2%)[a]	χ^2 = 0.281
	Full	26	18 (69.2%)[a]	p = 0.596
Treatment expectancy[b]	Brief	21	68.3% (15.6%)	t = 1.159
	Full	26	62% (20.3%)	p = 0.261
Average logins/week over 12 weeks	Brief	21	0.54 (0.34)	t = -0.385
	Full	26	0.59 (0.40)	p = 0.702

[a] Values represent: frequency (% sample); [b] % belief that depression would reduce after using the program; MDE: Major Depressive Episode





Participants

Participants with a lifetime history of at least one major depressive episode were recruited into the study.

Exclusion criteria were:

- alcohol consumption >14 units/week for females and >28 units/week for males
- use of injected drugs in the previous month
- daily use of an illicit substance
- history of psychosis or bipolar disorder
- acute suicidality or self harm requiring medical treatment in last 12 months

54 participants (39 females) were initially randomised into the 2 treatment groups. Seven participants failed to login during the 3 month treatment period and were excluded from further analysis. Two participants withdrew from the study and 18 were not able to be contacted for follow-up. This left 27 participants (50% of sample) with 3 month follow up mood data. For these preliminary analyses, missing values were substituted with the last observed score.

Results

Only preliminary results for short-term outcomes (3 month) on the DASS-21 are presented here. Data collection will continue to 12 months to assess relapse rates.

The two treatment groups were well matched on demographic characteristics, reporting similar levels of depressive symptoms, recurrence rates and expectations of treatment. Both groups also averaged around one login to the program per fortnight over a period of 12 weeks.

Mixed-model analysis of variance was used to investigate group differences over time. While both groups demonstrated a reduction in depressed mood from baseline to 3 months, participants who received the full program were found to achieve a significantly greater reduction than those who received the brief program (F = 4.43, 95%CI = 0.255 – 8.8, p = 0.038).

Conclusions

• The OnTrack Depression Program is effective at reducing depressed mood in people with a history of at least one major depressive episode.

• The full program resulted in greater reductions in depressed mood than the brief program, suggesting extended treatments offering more comprehensive intervention may have more impact than brief programs focusing on relapse prevention alone.

• Size of program did not influence engagement with the online treatment, with both groups showing comparable frequency of logins.

References

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