Cost-Outcome Description of a Therapist-Guided Internet-Based Therapy: A Multicenter Observational Study

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Estimate the costs and effects of a therapist-guided internetdelivered therapy for mental disorders after national implementation in Norway.



There is a lack of real world evidence on the costs and outcomes of internet-based psychotherapy. Randomized controlled trials demonstrate their effectiveness (1) and cost-effectiveness (2) but there is limited knowledge on how these findings generalize in real world settings (3).

Specific questions:

- How do the program costs vary between locations?
- Is the treatment effective?
- Is the effect comparable between locations?

| Design | Cost-outcome analysis of a single-arm observational study of four specialist mental health clinics in Norway. |
|--------------|--|
| Study period | Sept 2021 to June 2024 |
| Population | Mild to moderate depression, social anxiety & panic disorder |
| Intervention | Therapist-guided internet-delivered cognitive behavioral therapy |
| Costs | Maintenance and implementation (fixed) Therapists' time per patient (variable) |
| Outcomes | Clinical, health related quality of life & work productivity |
| Measurement | Baseline, Post Treatment & 6 months follow-up |

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| Age (mean / s.d.) | 33 | (10.9) | 0.023* |
|-----------------------------------|-------|---------|--------|
| Higher Education (n / %) | 171 | (41%) | 0.483 |
| Self Referred (n / %) | 151 | (27%) | 0.048* |
| Treatment Program (n / %) | | | |
| Depression | 271 | (48%) | 0.000* |
| Panic Disorder | 137 | (24%) | 0.678 |
| Social Anxiety | 157 | (28%) | 0.129 |
| EuroQol 5D-5L Index (mean / s.d.) | 0.541 | (0.245) | 0.132 |

Difference in HRQoL Baseline to Post Treatment by Location



| Preliminary analyses from linear mixed models indicate that compared to baseline, at post treatment and 6 months follow up*: | Instrument | | |
|--|----------------------------------|--|--|
| Health related quality of life improved significantly | EuroQoL 5D-5L index | | |
| Depression symptoms reduced siginificantly | Patient Health Questionnaire 9 | | |
| Social anxiety symptoms reduced siginificantly | Generalized Anxiety Disorder 7 | | |
| Work and social impairments reduced significantly | Work and Social Adjustment Scale | | |
| *There was no statistically significant difference in patient reported outcomes between locations | | | |

CONCLUSIONS

Digitally-delivered psychotherapy is effective in treating depression, anxiety and panic disorder in specialist care settings. It reduces symptoms and impairments, while also improving patients health related quality of life. The effects are maintained at 6 months followup post treatment indicating stability of outcomes. Patients' location of treatment does not significantly affect outcomes.

Program costs of the treatment may vary between locations mostly due to differences in the number of patients, therapists's skill mix and patients' engagement with the program.

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