Symptom-specific responses to psychotherapy versus combined therapy in the treatment of depression

A network approach

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Introduction

• Psychotherapy effective for mild-moderate depression
• Combined therapy not/slightly more effective

Based on scale scores as effect parameter

Cuijpers et al., Depress Anxiety 2009
De Jonghe et al., Br J Psychiatry 2004
Scale scores

Adjunctive pharmacotherapy

Sensitivity high

Adjunctive pharmacotherapy

Sensitivity low

Hieronymus et al., Mol Psychiatry 2016
Fried et al., Psychol Assess 2016
Symptom interrelatedness

Adjunctive pharmacotherapy
Symptom interrelatedness

The network approach

Adjunctive pharmacotherapy

Research question

What is the \textbf{symptom-specific} efficacy of psychotherapy versus combined therapy for mild-moderate depression while taking into account \textit{symptom interrelatedness}?
Methods

• RCT Mentrum Research Group
  – Short psychodynamic supportive psychotherapy (SPSP; N=61)
  – Combined SPSP and antidepressants (N=71)

• Depressive symptoms assessed with SCL-90

• Analyses
  – ANCOVA
  – L1-regularized partial correlation network
Symptom-specific efficacy

Introduction

Methods

Results

Discussion

Cohen's d

Psychotherapy

In favor of

Combined therapy

-1  -0.5  0  0.5  1

p

Obsessive thoughts [obs]  .002
Loss of sexual interest/pleasure [sex]  .06
Low in energy [ene]  .18
Thoughts of suicide [sui]  .14
Poor appetite [app]  .98

Emotional lability [emo]  <.001
Feeling entrapped [ent]  <.001
Self-blame [bla]  .02
Loneliness [lon]  .005
Blue mood [moo]  .006
Worry [wor]  <.001
Loss of interest [int]  .02
Concentration problems [con]  .04
Hopelessness [hop]  .001
Thoughts of death [dea]  .002
Worthlessness [wor]  .02
Direct and indirect effects

- **Introduction**
- **Methods**
- **Results**
- **Discussion**

Graph showing relationships between various concepts:
- **Wot**: Worthlessness
- **Tr**: Treatment type
- **Obs**: Obsessive thoughts
- **Sex**: Loss of sexual interest/pleasure
- **Ene**: Low in energy
- **Sui**: Thoughts of suicide
- **App**: Poor appetite
- **Emo**: Emotional lability
- **Ent**: Feeling entrapped
- **Bla**: Self-blame
- **Lon**: Loneliness
- **Moo**: Blue mood
- **Wor**: Worry
- **Int**: Loss of interest
- **Con**: Concentration problems
- **Hop**: Hopelessness
- **dea**: Thoughts of death
- **Wot**: Worthlessness

Legend:
- Green: $p \leq 0.05$ Positive association
- Red: $p \leq 0.05$ Negative association
- Light Green: $p > 0.05$ Positive association
- Pink: $p > 0.05$ Negative association
Direct and indirect effects

- tr  Treatment type
- obs  Obsessive thoughts
- sex  Loss of sexual interest/pleasure
- ene  Low in energy
- sui  Thoughts of suicide
- app  Poor appetite
- emo  Emotional lability
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Legend:
- $p \leq 0.05$ Positive association
- $p \leq 0.05$ Negative association
- $p > 0.05$ Positive association
- $p > 0.05$ Negative association

Sections:
- Introduction
- Methods
- Results
- Discussion
Direct and indirect effects

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- $p < 0.05$ Positive association
- $p < 0.05$ Negative association
- $p > 0.05$ Positive association
- $p > 0.05$ Negative association
Conclusions

• Combined therapy has a **symptom-specific advantage** compared to psychotherapy in the treatment of mild-moderate depressed patients

• Adjunctive pharmacotherapy directly targets **emotional lability**

**Implications**

• Patients with emotional lability can benefit from combined therapy, especially if they report connected symptoms as well
Limitations

• Small sample
• Treatment responses during same time period
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• Small sample
• Treatment responses during same time period
Recommendations

- Analyze **individual symptoms** in clinical trials
- Take into account their **interrelatedness**
Thank you for your attention

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