Collaborative care and psychiatric consultation models in primary care

C Van der Feltz-Cornelis Prof

Primary Care Psychiatry

Invitational Conference

Nijmegen, 2 oktober 2013
### Psychiatrist, Epidemiologist

**Employment**
- University of Tilburg/GGZ Breburg
- **Full Professor of Social Psychiatry**
- **Director of Clinical Center for Body, Mind and Health**
- **P.I. collaborative care trials CC:DIP CC:DIM CC:DOC CC:PAD**

**Grant funding**
- European Union FP7, DG Sanco
- Netherlands Organization for Health Research and Development
- Diabetes Foundation
- Medical and Social Insurance Companies
- Pharmaceutical companies Eli Lilly, Wyeth

**Board**
- Netherlands Institute of Mental Health and Addiction **Board, advisor 2013-**
- Dutch Psychiatric Association **2002-2005**
- Depression Initiative **2006-present**

**Guideline development**
- Guideline for consultation psychiatry (member) **2006-2007**
- Multidisciplinary guideline for MUS and somatoform disorder (vice chair) **2008-2009**

**Advisor**
- Netherlands Organization for Health Research and Development
- Netherlands Institute for Health Services Research
- Dutch Ministry of Health
- European Commission Mental Health Pact Committee

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*Updated September 2013*

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Collaborative Care Model

CL = consultant

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Collaborative Stepped Care in anxiety disorders

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### Patient characteristics

<table>
<thead>
<tr>
<th></th>
<th>CSC</th>
<th>CAU</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>114</td>
<td>66</td>
</tr>
<tr>
<td>Age</td>
<td>45</td>
<td>49</td>
</tr>
<tr>
<td>% Female</td>
<td>73%</td>
<td>61%</td>
</tr>
<tr>
<td>Diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-Panic</td>
<td>42%</td>
<td>44%</td>
</tr>
<tr>
<td>-GAD</td>
<td>28%</td>
<td>26%</td>
</tr>
<tr>
<td>-Panic + GAD</td>
<td>30%</td>
<td>30%</td>
</tr>
<tr>
<td>BAI score</td>
<td>24*</td>
<td>20*</td>
</tr>
<tr>
<td>Antidepressivant</td>
<td>22%*</td>
<td>38%*</td>
</tr>
</tbody>
</table>

Steps made in CSC

- 50% only guided self help
- Drop-out: 22% Before or during step 1
- 18% guided self help + antidepressant
- 10% guided self help + CBT (+/- antidepressant)
- Drop out: 18% after step 2
- Almost no psychiatric consultations
- 22% of the group already had antidepressants at baseline
- Low adherence to the model

Effectiveness of collaborative stepped care for anxiety disorders in primary care: a pragmatic cluster randomised controlled trial. Anna Muntingh, Christina van der Feltz-Cornelis, Harm van Marwijk, Philip Spinhoven, Willem Assendelf, Margot de Waa, Herman Adèr, & Anton van Balkom. Psychotherapy and psychosomatics in press
Nonadherence: patient profile

Non-adherent CSC patients versus adherent CSC patients on several baseline variables:

- Widowed or divorced (35% vs. 8%)
- Selected from the EMR instead of by their GP (57% vs. 19%)
- Low level of education (65% vs. 38%)
- Taking antidepressants at baseline (42% vs. 14%)
- Older (mean 54 vs. 43)
- More chronic conditions (mean 2.1 vs. 1.3)

Contents of Care: Care As Usual

- 22% Counseling in primary care by GP/POH-GGZ/ELP
- 38% Antidepressants +/- counseling
- 18% Referral to specialty mental health care
- 24% No treatment

Matched care may be better than stepped care
Adherence of patients as well as GPs should be improved
Indications for consultation by the psychiatrist should be better described

COLLABORATIVE CARE FOR DEPRESSION
Communication should be improved

- In terms of accessibility as well as in terms of protocol adherence (Who does what, when?)
Algorithm Huijbregts e.a. 2012

Based on risk profile and preference patient either:

PST OR PST with antidepressant

Supported by webbased tracking system

Monitoring every 6 weeks with PHQ score

Intensify treatment or switch if needed

Consultant psychiatrist in case of doubt or problems following algorithm

Adherence is indicated and monitored by the system
Behandeling Eerste Lijn voor T Test

Hieronder vindt u het beslissdiagram. Maak uw keuze.

1 Begin behandeling
   Datum: 22-10-2007

2 Meting van PHQ-9
   Symptoomscore: 9
   Ernstscore: 20

   **Let op:** Suiciderisico!
   U dient contact op te nemen met de huisarts om deze situatie te bespreken!
   Klik alleen op de knop indien dit gebeurd is.
   [OK, de huisarts is gecontacteerd]

   Klik hier om deze PHQ-9 meting te bekijken

3 Care manager vult het risicoprofiel in

   Klik hier om het risicoprofiel in te vullen
   Het risicoprofiel is nog niet afgenomen. U kunt verder gaan met de beslisboom nadat deze is voltooid.
<table>
<thead>
<tr>
<th></th>
<th>Usual Care (N=49)</th>
<th>Collaborative care (N=101) total</th>
<th>Collaborative care, screened (N=45)</th>
<th>Collaborative care, GP referred</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean age (SD)</strong></td>
<td>52.43 (14.72)</td>
<td>46.87 (13.43)*</td>
<td>52.02 (12.98)</td>
<td>42.7 (12.4)*</td>
</tr>
<tr>
<td><strong>PHQ₉, mean (SD)</strong></td>
<td>14.84 (4.83)</td>
<td>15.61 (4.91)</td>
<td>14.58 (5.04)</td>
<td>16.4 (4.7)</td>
</tr>
</tbody>
</table>
Enhanced Compliance in collaborative care

- 69 patients of 86 reported about contact with their GP in the last 3 months.

- 28 (41%) of these had contact: 21 in collaborative care and 7 CAU (threefold contact in collaborative care)
  - Significant: Chi square .029

<table>
<thead>
<tr>
<th>GP advice</th>
<th>Collaborative care</th>
<th>CAU</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 advice</td>
<td>9</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>2 advices</td>
<td>11</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>3 advices</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>7</td>
<td>28</td>
</tr>
</tbody>
</table>

(threefold treatment advice GP in collaborative care)

Significant: Chi square .047

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## Efficacy

<table>
<thead>
<tr>
<th>Outcome</th>
<th>CAU</th>
<th>CCtotal</th>
<th>CCscreen</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 months (T1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>38</td>
<td>61</td>
<td>31</td>
</tr>
<tr>
<td>Treatment response (%) T1</td>
<td>10.5%</td>
<td>45.9%</td>
<td>41.9%</td>
</tr>
<tr>
<td>OR (95% BI)</td>
<td>Ref. Cat.</td>
<td>5.20* (1.41-16.09)</td>
<td>4.59* (1.15-18.34)</td>
</tr>
<tr>
<td>NNT (only if P&lt;.05)</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>6 months (T2)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>.39</td>
<td>63</td>
<td>31</td>
</tr>
<tr>
<td>Treatment response (%) T2</td>
<td>25.6%</td>
<td>39.7%</td>
<td>29.0%</td>
</tr>
<tr>
<td>OR (95% BI)</td>
<td>Ref. Cat.</td>
<td>1.99 (.70-5.67)</td>
<td>1.27 (.38-4.17)</td>
</tr>
<tr>
<td>9 months (T3)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>31</td>
<td>59</td>
<td>28</td>
</tr>
<tr>
<td>Treatment response (%) T3</td>
<td>25.8%</td>
<td>61.0%</td>
<td>50.0%</td>
</tr>
<tr>
<td>OR (95% BI)</td>
<td>Ref. Cat.</td>
<td>5.62* (1.40-22.58)</td>
<td>4.06 (.92-17.80)</td>
</tr>
<tr>
<td>NNT (only if P&lt;.05)</td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>12 months (T4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>32</td>
<td>58</td>
<td>33</td>
</tr>
<tr>
<td>Treatment response (%) T4</td>
<td>25.0%</td>
<td>39.7%</td>
<td>33.3%</td>
</tr>
<tr>
<td>OR (95% BI)</td>
<td>Ref. Cat.</td>
<td>1.82 (.61-5.42)</td>
<td>1.47 (.45-4.81)</td>
</tr>
</tbody>
</table>
Psychiatric consultations facilitate coherent health care

- Introduction stepped care in a chain from primary to secondary care
- Facilitated by psychiatric consultations
- Number of consultations increased
- Number of referrals and admissions decreased
- Content of care in primary care improved
  > Zeeland
  > Later incorporated in Belgium\(^{14}\)

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META ANALYSIS PSYCHIATRIC CONSULTATION

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<table>
<thead>
<tr>
<th>Study</th>
<th>Study design</th>
<th>N</th>
<th>Psychiatric diagnosis</th>
<th>Outcome compared to CAU</th>
</tr>
</thead>
</table>
| Katon 1995 | RCT | 1 clinic with 22 family physicians. 217 patients | Depression | – Improved adherence to medication  
– Improved depression outcome in major depressive disorder |
| Katon 2004 Pathways Study | RCT | 9 clinics from a HMO. 329 patients | Comorbid depression in diabetes mellitus | – Improved depression outcomes  
– No significant improvement in glycemic control |
| Unützer, 2002 IMPACT trial. | RCT | 18 clinics from 8 HMOs. 1801 patients | Late-life depression (≥60 years old) | – Improvement of general functioning  
– Improvement of depressive symptoms |
| Hunkeler, 2006 IMPACT trial. | RCT | 18 clinics from 8 HMOs. 1801 patients | Late-life depression (≥60 years old) | – Adherence to treatment improved in long-term  
– Depression outcomes improved in long-term  
– General functioning improved in long-term |
| Single psychiatric consultation vis-à-vis with patient in the primary care practice, in the presence of FP, and advising FP and patient by CL | Van der Feltz-Cornelis, 2006 | RCT. Cluster Randomization | 36 general practices. 81 patients | Medically unexplained symptoms | – Improvement of social function  
– Decrease in severity of the physical symptom  
– Reduction in the utilization of medical care |
| Katon, 1992 | RCT. Cluster randomization | 18 clinics. 251 patients. | Distressed high utilizers | – Increase of consumption of antidepressants  
– Improvement of treatment compliance |
| Katzelnick, 2000 | RCT. Cluster randomization | 163 clinics in 3 HMOs. 407 patients. | Depressed high utilizers | – Improved general health status  
– Improved depression outcomes |
| Collaborative care with psychiatrist giving consultation vis-à-vis to patient in the primary care practice, and advising CM and FP | Katon, 1999 | RCT | 4 clinics with 73 family physicians. 228 patients. | Persistent depression | – Improved adherence to medication  
– Improved depression outcomes |
| Single psychiatric consultation, vis-à-vis with patient, not in the family practice, with a CL to FP | Smith, 1986 | RCT. Cluster randomization. Cross-over | 38 patients | Somatization disorder | – Reduction in the costs of medical care by 53% |
| Smith, 1995 | RCT. Cluster | 56 patients | Somatoform disorder | – Reduction in the costs of medical care by 33% |
Effect size in Somatoform disorders 0.614 (0.206-1.022)

<table>
<thead>
<tr>
<th>Study name</th>
<th>Outcome</th>
<th>Std diff in means and 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katon, 1992</td>
<td>Combined</td>
<td></td>
</tr>
<tr>
<td>Smith, 1986</td>
<td>Health Care Use</td>
<td></td>
</tr>
<tr>
<td>Smith, 1995</td>
<td>Combined</td>
<td></td>
</tr>
<tr>
<td>Van der Feltz-Cornelis, 2006</td>
<td>Combined</td>
<td></td>
</tr>
</tbody>
</table>

Meta analysis all psychiatric consultation models in primary care

Van der Feltz-Cornelis e.a. 2010 JPR
Meta analysis 10 RCTs, 3408 pts

<table>
<thead>
<tr>
<th>Group by</th>
<th>Study name</th>
<th>Outcome</th>
<th>Std diff in means and 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultation letter</td>
<td>Katon, 1999</td>
<td>Combined</td>
<td></td>
</tr>
<tr>
<td>Consultation letter</td>
<td>Smith, 1986</td>
<td>Health Care Use</td>
<td></td>
</tr>
<tr>
<td>Consultation letter</td>
<td>Smith, 1995</td>
<td>Combined</td>
<td></td>
</tr>
<tr>
<td>Consultation letter</td>
<td>Van der Feltz-Cornelis, 2006</td>
<td>Combined</td>
<td></td>
</tr>
<tr>
<td>No consultation letter</td>
<td>Hunkeler, 2006</td>
<td>Combined</td>
<td></td>
</tr>
<tr>
<td>No consultation letter</td>
<td>Katon, 1992</td>
<td>Combined</td>
<td></td>
</tr>
<tr>
<td>No consultation letter</td>
<td>Katon, 1995</td>
<td>Combined</td>
<td></td>
</tr>
<tr>
<td>No consultation letter</td>
<td>Katon, 2004</td>
<td>Psychological symptoms</td>
<td></td>
</tr>
<tr>
<td>No consultation letter</td>
<td>Katzelnick, 2000</td>
<td>Combined</td>
<td></td>
</tr>
<tr>
<td>No consultation letter</td>
<td>unutzer, 2002</td>
<td>Combined</td>
<td></td>
</tr>
</tbody>
</table>

With CL letter 0.561 (0.337-0.786), without 0.210 (0.102-0.319)

Van der Feltz-Cornelis e.a. 2010 JPR

Meta analysis all psychiatric consultation models in primary care
Psychiatric consultation

- Psychiatric consultations effective for depression and MUS
- Effect size for MUS bigger than for depression
- Effect increases at direct contact with patient and with general practitioner
- Consultation letter increases effect most
- Mostly in association with integrated care\(^{15}\)
- Collaborative care more effective in case of structural consultation\(^{16}\)
- In Dutch settings consultation appears to be feasible and effective as well\(^{17}\)

\(^{15}\) Van der Feltz-Cornelis, Van Os, Van Marwijk en Leentjens. Effect of psychiatric consultation. Systematic review and meta analysis. JPR 2010 in press

\(^{16}\) Bower e.a. Br J Psychiatry 2006

Caremanagers like to work with the model

Qualitative research
E. Licht, J.L. Jellema, M. Meere, H.W.J. van Marwijk, C.M. van der Feltz-Cornelis.

Invoering van een collaborative care zorgmodel in de setting van de Stichting Amsterdamse Gezondheidscentra

Een kwalitatief onderzoek in het kader van het Depressie Initiatief

- Adherence to the model is good
- Web based tracking system and consultation provide good decision aid and supervision structure
- GPs would like a link with the EPD