The Role of Complementary and Alternative Medicine for Prevention and Treatment in Chronic Diseases

The EU Summit on Chronic Diseases
Brussels, 3rd April 2014

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http://epidemiologie.charite.de/
## Complementary and Alternative Medicine (CAM) in Germany (12 months)

<table>
<thead>
<tr>
<th>CAM Method</th>
<th>Total (n=1100)</th>
<th>Male (n=551)</th>
<th>Female (n=549)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naturopathy (%)</td>
<td>57</td>
<td>50</td>
<td>65</td>
</tr>
<tr>
<td>Chirotherapy (%)</td>
<td>14</td>
<td>13</td>
<td>15</td>
</tr>
<tr>
<td>Homeopathy (%)</td>
<td>15</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Acupuncture (%)</td>
<td>9</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Chinese Medicine (%)</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Ayurveda (%)</td>
<td>1</td>
<td>0.4</td>
<td>1</td>
</tr>
<tr>
<td>Anthroposophic Med. (%)</td>
<td>1</td>
<td>0.3</td>
<td>2</td>
</tr>
</tbody>
</table>

Härtel/Volger, Forsch Komplementärmed Klass Naturheilkd 2004;11:327-334
### CAM use in Germany (12 months)

<table>
<thead>
<tr>
<th>Condition</th>
<th>Total (n=360)</th>
<th>Male (n=156)</th>
<th>Female (n=204)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back pain (%)</td>
<td>57</td>
<td>58</td>
<td>56</td>
</tr>
<tr>
<td>Influenzal infection (%)</td>
<td>29</td>
<td>27</td>
<td>31</td>
</tr>
<tr>
<td>Headache (%)</td>
<td>19</td>
<td>14</td>
<td>22</td>
</tr>
<tr>
<td>GI disorders (%)</td>
<td>12</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Allergies (%)</td>
<td>11</td>
<td>13</td>
<td>11</td>
</tr>
<tr>
<td>Insomnia (%)</td>
<td>9</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Heart/Circulatory diseases</td>
<td>9</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Rheumatism (%)</td>
<td>8</td>
<td>6</td>
<td>11</td>
</tr>
</tbody>
</table>

Härtel/Volger, Forsch Komplementärmed Klass Naturheilkd 2004;11:327-334
CAMbrella

CAMbrella – A pan-European research network for Complementary and Alternative Medicine (CAM)

Aims:  
1. To review the status quo of CAM in the EU  
2. Proposal for a CAM research roadmap

Project type:  Coordination Action
Duration:  3 years (Jan 2010 – Dec 2012)
Funding:  1.5 Mio € EC contribution

Information:  www.cambrella.eu
Coordinators:  Klinikum rechts der Isar, Munich  
Dr. W. Wiedenhammer

Consortium:  16 participants from 12 European countries
CAMbrella – Consortium
CAM in Europe – Prevalence data

Systematic Review Results (N= 87 studies):

• Prevalence of CAM use is up to 86% in EU countries

• Top five reported CAM therapies:
  Herbal medicine, Homeopathy, Chiropractic, Acupuncture, Reflexology

• CAM use in more than 90% by patients with chronic diseases

CAM in Europe – Providers

Health Technology Assessment Results:

> 300,000 registered CAM providers in the EU:

- 145,000 medical providers
- 160,000 non-medical providers
- > 95,000 acupuncturists
- 65 CAM providers per 100,000 inhabitants

(95 general practitioners per 100,000 inhabitants)

CAMbrella – EU citizens perspective

- A majority of citizens holds positive attitudes to CAM

- Problems for EU citizens to get valid and objective information about CAM treatments, access to CAM provision in CAM and quality and safety of Care in CAM

- Citizens gather information about CAM in two main ways: citizens’ social networks and biomedical professionals

CAMbrella – Results 2 WP Results

Professor
Dr. Vinjar Fønnebø,
S Wiesener,
University of Tromsø,
Norway

WP 7 CAM Research Roadmap Background

- CAM is very prevalent within Europe **but** no clear picture of CAM use across the whole EU.

- CAM research is not coordinated and follow no strategic plan in the EU.

Significant evidence gaps for CAM regarding prevalence, effectiveness, efficacy, safety and costs.
CAM Research Roadmap – Vision for 2020

- To establish a **solid evidence base** that enables **European citizens and medical /non-medical healthcare providers** to make **informed decisions about CAM utilisation**

- Roadmap proposes a **methodological and strategic research agenda** for the field of CAM to address future European health care challenges such as chronic diseases
Research Roadmap - Key Research Areas:

1. CAM prevalence in the EU
2. Needs and attitudes of citizens and providers
3. Safety
4. Comparative Effectiveness > Efficacy
5. Research of Meaning/Context Factors in CAM/Conv. Med
6. Models in CAM integration into health systems

Methods: Mixed Methods Approach – Stakeholder Involvement

Problems: Funding, Research infrastructure

Fischer F, ..., Brinkhaus B. BMC CAM 2013
Example:

Acupuncture in Patents with Chronic Diseases

Further high quality research in other CAM disciplines in e.g.

• Herbal medicine
• Homeopathy
• Mind Body Medicine
• Anthroposophic Medicine
Research Projekt on Acupuncture 2001-2006

Model Project Acupuncture
Funded by selected Health Insurance Companies in Germany

- **ART**
  Randomised, Controlled Trials
  - Specific Effects
    (Efficacy)

- **ARC**
  Partly randomised, Controlled Trials
  - Overall effect In Routine Care
    (Effectiveness)

- **ASH**
  Prospective Cohort Studies
  - Safety

Witt CW, Brinkhaus B et al. Dt. Ärzteblatt Nr. 4, 2006
Acupuncture Randomised Controlled Trials - Response rates

LBP: ≥ 50% reduction VAS pain, GON: ≥ 50% reduction WOMAC
MIG: ≥ 50% reduction migraine attacks, TTH: ≥ 50% reduction headache days

Linde K et al. JAMA 2005; Melchart D et al. BMJ 2005,
Witt CM, Brinkhaus B et al. Lancet 2005
Safety of Acupuncture

• Germany ¹
  – 2,2 Mio. treatments (229,230 patients 10±3 treatments)
  – 8.6% at least one adverse effect
  – 6.1% bleeding/haematoma
  – 1.7% pain
  – 2.2.% required treatment
  – 2 pneumothorax (1 in 1 Mio. Treatments)

• UK ²,³
  – 60,000 treatments:
  – no serious adverse events, for acupuncture provided either by physicians¹ or by professional practitioners²

¹Witt CM, Brinkhaus B et al Forsch Komplementmed 2009  
<table>
<thead>
<tr>
<th>Indication</th>
<th>Author</th>
<th>Journal</th>
<th>Studies</th>
<th>Conclusion/Effectiveness/Efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migraine</td>
<td>Linde et al.</td>
<td>Cochrane Database 2009</td>
<td>22</td>
<td>+ / -</td>
</tr>
<tr>
<td>Tension type headache</td>
<td>Linde et al.</td>
<td>Cochrane Database 2009</td>
<td>11</td>
<td>+ / +</td>
</tr>
<tr>
<td>Low back pain</td>
<td>Furlan et al.</td>
<td>Cochrane Database 2005</td>
<td>22</td>
<td>+ / +</td>
</tr>
<tr>
<td>Neck pain</td>
<td>Trinh et al.</td>
<td>Cochrane Database 2006</td>
<td>10</td>
<td>+ / +</td>
</tr>
<tr>
<td>Shoulder pain</td>
<td>Green et al.</td>
<td>Cochrane Database 2005</td>
<td>9</td>
<td>? / -</td>
</tr>
<tr>
<td>IBS syndrome</td>
<td>Manheimer et al.</td>
<td>Cochrane Database 2012</td>
<td>7</td>
<td>+ / -</td>
</tr>
<tr>
<td>Dysmenorrhoe</td>
<td>Smith et al.</td>
<td>Cochrane Database 2011</td>
<td>10</td>
<td>+ / +</td>
</tr>
<tr>
<td>Fibromyalgia</td>
<td>Lanhorst et al.</td>
<td>Rheumatology 2010</td>
<td>7</td>
<td>+ / -</td>
</tr>
</tbody>
</table>

+ = positive Evidence  = negative Evidence
Acupuncture for Seasonal Allergic Rhinitis

RCT N = 402, Primary Outcomes (Week 8)

Brinkhaus B et al. Ann Internal Medicine 2013

Funding: DFG
Summary

- **CAM is used frequently** in chronic diseases by the EU population, CAM is already part of prevalence and treatment of chronic diseases.

- **Significant evidence gaps of CAM** including prevalence, safety, effectiveness and health economic aspects of CAM in Europe.

- **More research on CAM is urgently needed!**

- **Six core areas for research into CAM** to adequately address the possible contribution of CAM to upcoming health care challenges.

- CAM research needs to make use of **generally accepted research methodology** – mixed methods approach – research funding problem.

- Only EbM based CAM treatments should be included in the medical healthcare system in the future —> **Intensive scientific evaluation**.
CAMbrella – Literatur (Online - Open Access)

- [http://www.cambrella.eu/home](http://www.cambrella.eu/home)
- PHAIDRA is the online repository for EU projects hosted in the University of Vienna - [https://phaidra.univie.ac.at/](https://phaidra.univie.ac.at/)
- Falkenberg T et al. Forsch Komplementmed 2012;19(suppl 2):6-8
- Von Ammon K et al. Forsch Komplementmed 2012;19(suppl 2):37-43
- Fischer HF et al. Forsch Komplementmed 2012;19(suppl 2):51-60
- Reiter B et al. Forsch Komplementmed 2012;19(suppl 2):61-68
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Thank you for your attention!