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European Policy Brief

The Roadmap for European CAM Research

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What is CAM?

"Complementary and Alternative Medicine" (CAM) is an umbrella term for treatment practices mainly used outside conventional medicine. The most prominent CAM disciplines in the EU are herbal medicine, acupuncture, homeopathy and manual therapies (like massage, osteopathy and reflexology), but CAM also includes such practices as anthroposophic medicine and naturopathy. CAM is practised mostly in private practice by medical doctors and practitioners trained in the specific disciplines.

The role of CAM in European healthcare

The *WHO global atlas of traditional, complementary and alternative medicine* concludes that CAM is highly prevalent within Europe. Estimates vary highly and give a range of between 10% and over 50% of European citizens who use CAM for their healthcare needs. CAM is a popular treatment strategy for chronic diseases, disease prevention and health management. European citizens and patients perceive it as a health approach that treats their specific health needs in an individualised way, which they often miss in conventional medicine.

SEVENTH FRAMEWORK PROGRAMME

The broad scope of CAM is reflected by the pragmatic definition:

"Complementary and Alternative Medicine (CAM) utilised by European citizens represents a variety of different medical systems and therapies based on the knowledge, skills and practices derived from theories, philosophies and experiences used to maintain and improve health, as well as to prevent, diagnose, relieve or treat physical and mental illnesses. CAM has been mainly used outside conventional healthcare, but in some countries certain treatments are being adopted or adapted by conventional healthcare." Forsch Komplementmed 2012; 19 (suppl 2).

The problems

– There is no clear terminology – definitions vary and differ from one language and culture to another.

– Regulations and laws on CAM provision differ greatly – every member and associate state, sometimes even regions within one member state, has different rules regarding use and provision.

– All stakeholders, including citizens, patients, healthcare providers and policy makers, lack access to reliable information about CAM.

– There is also a lack of reliable research data: we know far too little about the safety and effectiveness of many CAM treatments and their possible cost-benefit in clinical practice, nor do we have access to epidemiological facts such as the prevalence of CAM. This applies also to the basic research into the working mechanisms of CAM procedures.

– CAM is still not taken seriously by a number of medical scientists who regard it as an irrational approach to healthcare; this view is shared by parts of the public.

CAM research: more EU focus required

There is considerable heterogeneity within CAM in the EU and a lack of reliable data on all its aspects: definitions, use, provision, education, legislation, regulation, safety, and as regards the clinical topics of efficacy and effectiveness. It is vital to obtain a robust picture of CAM use and reliable information about its cost, safety and effectiveness in real world settings.This report summarises the key data that have been identified by the research programme, and finishes with a roadmap for future research into CAM and a series of recommendations.

Key findings: The citizens' perspective

It was only possible to study 18 of the 39 member states and associated countries, due to a lack of data in the remaining 21. Substantial research-based knowledge about the needs of citizens with respect to CAM is available primarily from the UK. Nevertheless, the following tendencies can be reported:

Citizens in the EU wish to have access to increased and diverse CAM provision Studies indicate that citizens wish CAM to be available as part of their normal healthcare, for example in hospital and general practice care. They also wish CAM provision to be delivered not only by medical doctors and/or doctors trained in CAM specialities, but also by CAM providers with therapy specific training. There is a wish for more, and more diverse, CAM provision.

Barriers in the access to CAM EU citizens also seem to meet considerable barriers in the access to CAM: CAM treatments are predominantly paid for privately and are difficult to access due to lack of availability and limited accessibility.

Citizens express a wish for more support and information regarding CAM from the medical professionals CAM use is often not disclosed by patients in other treatments because of the assumed or known hostile attitude of the medical professionals towards CAM treatments.

Citizens need easily accessible and trustworthy information European citizens wish to have access to reliable and trustworthy information that can support an informed decision about treatment options.

Citizens require transparent regulation of CAM practice and training Citizens' confidence in the provision of CAM is enhanced when CAM is provided within an existing framework such as general or hospital practice or when the practitioners are members of professional CAM organisations that ensure educational as well as ethical standards.

Prevalence in the EU

There is a lack of reliable data on the prevalence of CAM While there are a few rigorous prevalence studies that are based on nationally representative samples, the vast majority are small and of poor quality. Most EU countries do not have any data at all. Reported prevalence rates of CAM use were between 0.3% and 86%. Use of herbal medicine was the most frequently reported use of CAM. Musculoskeletal problems were the most reported condition. Disappointment with Western medicine was a main reason for CAM use, although it is not possible to derive definitive conclusions due to the small numbers of studies reporting this data.

Provision and regulation in the EU

Both medical and non-medical practitioners play an important role in the provision of CAM within the healthcare system in Europe.

CAM provision in the EU27+12 is maintained by more than 150,000 registered medical doctors (MDs) with additional CAM certification and more than 180,000 registered and certified non-medical CAM practitioners. This suggests up to 65 CAM providers (35 non-medical practitioners and 30 physicians) per 100,000 inhabitants, compared to the EU figures of 95 general medical practitioners per 100,000 inhabitants.

Acupuncture is the most frequently provided method (53% of all practitioners) with 80,000 physicians and 16,000 non-medical practitioners trained in the therapy, followed by homeopathy (27% – 45,000 and 4,500, respectively). These two disciplines are mostly provided by physicians. Herbal medicine and manual therapies are almost exclusively provided by non-medical practitioners.

Naturopathy, on the other hand, is dominated by approximately 15,000 (mostly German) physicians, as is anthroposophic medicine (4,500) and neural therapy (1,500).

No common approach can be identified as regards the provision of CAM practice in Europe Each of the 39 countries studied has its own approach. Teaching and certification are subject to international, national or in some countries even regional regulations. There is a complete lack of coherence in training, education and provision of CAM.

No common approach can be identified as regards the regulation of CAM practice in Europe The regulatory environment determines how a provider can be educated, certified and offer services. There is a huge variety in regional, national, European and international legal regulations, which make any comparison of CAM practice and provision in any respect almost impossible. Although diversity in healthcare regulation enables a wider choice of options with regard to CAM aspects of healthcare, the same diversity seriously hampers any efforts to establish EU-wide predictable conditions for both treatment and research.

Industry in the EU

Many CAM treatments are "hands-on" and/or consultative, without substantial turnover in medicinal products or equipment. The largest industry is in herbal and homeopathic products and dietary supplements.

There are no clear figures about the whole market for CAM related products. IMS Health gives an estimate of approximately €6 billion for the European share of global market of herbal medications in 2010, which is estimated at more than €11 billion.[1, 2]

As regards homeopathic medicinal products, the EU market represents about 0.7% of the European pharmaceutical market, generating about €1 billion (ex-factory prices) in 2010 (ECHAMP 2011[3]).

An economic perspective

Costs in general and cost effectiveness in particular have not been the focus of the CAMbrella project. A number of high quality studies indicate cost effectiveness and even cost savings for single CAM treatments, as was shown in a recent systematic review.[4]

1 IMS Health, 2010 – ref. by Busse, Werner R.

2 Herbal supplements and remedies – a global strategic business report. Global Industry Analysts, Inc, March 2012: http://www.strategyr.com/Herbal_Supplements_and_Remedies_Market_Report.asp

3 ECHAMP – European Coalition on Homeopathic and Anthroposophic Medicinal Products

4 Herman, PM, Poindexter BL, Witt CM, et al: Are complementary therapies and integrative care cost-effective? A systematic review of economic evaluations. BMJ Open 2012;2:e001046.doi:10.1136/bmjopen-2012-001046

Legislation in the EU

19 of the 39 countries have a general legislation for CAM, of which eleven have a specific CAM law and eight have sections on CAM included in their health laws (such as "Law on healthcare" or "Law on health professionals"). In addition to general CAM legislation, some countries have regulations on specific CAM treatments.

Obstacles for patients When patients cross borders in search of CAM treatment, they may encounter substantial differences in the professional background of apparently identical CAM providers, who in addition tend to work under completely different reimbursement systems. This situation influences CAM patients' rights, access and potential safety, and constitutes a challenge to a harmonized national and European follow-up of the new patients' rights according to the cross-border healthcare Directive 2011/24/EU.[5]

Obstacles for practitioners When practitioners cross borders they will encounter a substantial variety of CAM practice in Europe. While CAM professions in some countries are tightly regulated, the same professional categories in other countries are totally unregulated, meaning that it is almost impossible to establish professional common ground and cross-border employment.

Obstacles for researchers When researchers cross borders they will experience that research on efficacy and effectiveness of CAM is severely hampered by the heterogeneity of European regulations. Practices and practitioners are not comparable across national boundaries, and any observational or experimental study can therefore be generalised only within a narrow national or cultural context.

5 http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:088:0045:0065:EN:PDF

The roadmap for European CAM research

The following "Roadmap for European CAM research" describes a strategic approach to research for the field of CAM. It is based on past experiences in CAM research and designed to address future European healthcare challenges. It takes the findings of all the CAMbrella work packages into account.

CAMbrella´s vision for 2020 is that an evidence base is established which enables European citizens, healthcare providers and other stakeholders to make informed decisions about CAM. Currently, there is too little general knowledge about the state of CAM in Europe, especially on

– the prevalence of use of CAM

– the needs and attitudes of EU citizens, patients and providers regarding CAM

– the types and modes of CAM provision.

Past research with its focus on the underlying mechanisms of CAM hasn't met the more pressing questions about CAM as possible reasonable treatment options in addition or alternative to routine care protocols. Furthermore, the considerable heterogeneity within CAM in the EU has hampered the development of pan-European research efforts. The challenges now are to:

– address the needs and attitudes of EU citizens, patients and providers

– get essential information about the real situation as regards provision and use of CAM in all countries of Europe

– create a valid knowledge data base on CAM effectiveness, costs and safety

– establish scientific knowledge that enables all stakeholders including citizens, healthcare providers, policy makers and researchers to make informed decisions about CAM.

Conclusions and recommendations

In order to consider employing CAM as part of the solution to the health-care challenges we face in 2020, it is vital to obtain reliable information on its cost, safety and effectiveness in real world settings. This research strategy aims to provide the EU and its citizens with valuable scientific information for stakeholder decisions about CAM treatments.

1. **CAM is a neglected area of research – it needs active encouragement**

European research in the field of CAM is limited and our knowledge about CAM is very poor. There is almost no significant investment in any EU country in a CAM research structure or strategy. The CAM industry is relatively small and there are no major financial or/and industrial interests driving research efforts in this field. Scientific bias hampers the free exchange of ideas, concepts, treatment techniques and comparison of clinical outcomes. CAM is organised mostly in private provider settings (medical and non-medical), thus the academic experience among CAM providers is scarce and there are few academic centres of research, resulting in a substantial lack of funding for research programmes. Career opportunities in an academic setting are rare.

In order to pay proper attention to the real situation of use and provision of CAM in Europe and to understand why CAM is so popular within the EU, structural and sufficient financial support is needed to give active encouragement to research at all levels: private, university bound, national and European.

Europe lags well behind other regions such as North America, Asia and Australia in terms of the level of investment in CAM research and the integration of research results into health policy and health regulation, and into CAM provision and practice. Europe also lacks an equivalent to international stakeholders such as Ayush in India (regulatory body for Ayurvedic medicine, Yoga, Unani, Sidda and Homeopathy) and NCCAM (National Center for CAM in the US, part of the National Institute of Health).

2. An EU research strategy for CAM must reflect the needs of the citizens, patients, providers and other CAM stakeholders

CAM is frequently employed in primary prevention, health literacy and self-management of chronic long-term conditions. Therefore it could contribute to the upcoming healthcare challenges in Europe. Most urgently needed is to

– establish a European-wide approach for the assessment of prevalence of use for core CAM disciplines

– address the diversity of training, education and provision of CAM across Europe

– identify the most promising CAM treatment options for the most prevalent health conditions in Europe (obesity, chronic diseases like diabetes, cancer, musculoskeletal problems, healthy ageing and others)

– quantify the economic effects of CAM in European healthcare.

Stakeholders have different views on CAM; these views should be taken into account in order to achieve meaningful research and allow stakeholders to make informed decisions for future healthcare planning. Thus, research has to:

– identify the citizens' access to and preferences for CAM provision as well as their perspectives on education, training and practice of CAM providers

– determine how best to disseminate scientifically sound information about CAM to the European public, in line with the EU objective to enhance the ability of citizens to make better and informed decisions about their healthcare

– give clear guidance on CAM safety issues

– research and evaluate different models of CAM healthcare integration into routine care programmes.

3. **Research methods must reflect the real-world settings of healthcare in Europe**

   Everyone needs to know in what situation CAM is a reasonable choice. Therefore we recommend a clear emphasis on concurrent evaluation of CAM as an additional or alternative treatment strategy in real-world settings. Thereby, CAM should be considered along the same scientific lines that apply to medical research in general.

   The strategy for the investigation of CAM should include a broad range of mixed-method research strategies: comparative effectiveness research, qualitative and quantitative designs as well as cost-effectiveness studies. Stakeholders such as citizens, patients and providers should be closely involved to ensure real world relevance for the research.

   Specifically, we recommend to

   – implement comparative effectiveness research (CER) and concurrent health economic evaluation of different treatment strategies including CAM

   – put emphasis on the investigation of CAM safety in clinical contexts, e.g. by support of country-wide registers, observational studies, single case studies or case histories

   – address the impact of context and meaning factors (generally known as non-specific effects and may include the "placebo effect") such as preferences and expectations in clinical research.

4. **A centralised and academically supported EU CAM centre should make this EU research strategy operational**

   Currently there is little research on CAM in Europe and no structure which provides research coordination within the EU. There is a widely recognised need to ensure high quality research in order to enable scientific knowledge that is considered adequate for informed decision making by both providers and patients of CAM. We therefore propose that the EU actively supports an EU-wide strategic approach via the funding of an EU centre for CAM research. The EU centre coordinates research efforts and gives research-based guidelines. The centre´s goal is to actively stimulate and coordinate high quality CAM research in the EU. Research should be based on pan-European international collaboration and follow an independent research strategy aligned with EU health policy.

Recommendations for Policy Makers – CAMbrella calls on

the Members of the European Parliament, the European Commission, and the national health and research policy makers:

to develop and implement a coherent CAM research strategy based on the findings of the CAMbrella project, especially the "roadmap", which aims to

- establish a European–wide approach to assess the prevalence of use of core CAM treatment disciplines
- identify the citizens' access to and preferences for CAM provision as well as their perspectives on education, training and practice of CAM providers
- identify the most promising CAM treatment options for the most prevalent health conditions in Europe (chronic diseases like cancer, diabetes, musculoskeletal problems, obesity, and many others in an ageing population) with a clear emphasis on concurrent evaluation of CAM as an additional or alternative treatment strategy in real–world settings
- quantify the economic effects of CAM in European healthcare
- give clear guidance on CAM safety issues
- research and evaluate different models of CAM healthcare integration into routine care programmes
- address the diversity of training, education, regulation and provision of CAM across Europe
- collect and disseminate valuable CAM research findings for the European citizens and CAM providers and the scientific community
- foster the pan–European collaboration between CAM researchers by financially support of academic exchange and improve European CAM research capability by establishing career opportunities for excellent researchers in the field of CAM.

the European Commission DG Research and Innovation:

to recognize and give priority to research into CAM by

– addressing CAM as a possible contributor to European health issues in Horizon 2020, the Framework Programme for Research and Innovation, under its focus on "Health, demographic change and wellbeing"

– develop and support research projects which address the core research areas as described in the CAMbrella roadmap

– demand and ensure the implementation of adequate and modern research methodology as described in the CAMbrella roadmap in research projects, programmes and calls.

the European Commission DG Health and Consumers:

to consider the CAMbrella findings and the consideration of CAM research in all Community Actions concerning

– public health

– health education and promotion

– prevention and treatment of chronic disease

– health inequalities

– active and healthy ageing

– patient safety and antimicrobial resistance.

Project Rationale

What is CAMbrella?

The CAMbrella project looks into the current situation of Complementary and Alternative Medicine (CAM) in Europe. It has been working to establish sound knowledge of the core issues and current status of CAM in the EU.

The aims of CAMbrella are to:

– create a knowledge base on patients' demand for CAM and the prevalence of its use in Europe

– review the current legal status of CAM in EU member and associated states

– explore the needs and attitudes of EU citizens with respect to CAM

– explore the providers´ perspective on CAM treatments in the EU

– consult the global dimension of CAM research and development strategies

– propose an appropriate strategy to help develop an understanding of CAM use and its effectiveness in response to the needs of healthcare funding bodies, providers and patients

– facilitate and foster sustainable, high quality collaboration and networking of European CAM researchers.

Methodology

These aims have been pursued in eight work packages and have resulted in a series of research papers and work package reports that reflect the current knowledge in the field. These as well as all other products generated by the project will be published on the website: www.cambrella.eu. Research papers also will be published in scientific journals. Methods applied were systematic literature reviews, workshops, interviews and consensus meetings.

Geographical scope

The project was intended to review the situation in the 27 EU member states plus the 12 associated countries.

Project Identity	HEALTH-F2-2009-241951
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