Available online at www.sciencedirect.com

ScienceDirect

European Journal of Integrative Medicine 6 (2014) 12–20

European Journal of INTEGRATIVE MEDICINE

www.elsevier.com/eujim

Opinion article

# Evidence-informed integrative care systems—The way forward

Tobias Sundberg [a,b], Johanna Hök [a,b,c], David Finer [a], Maria Arman [a,b], Jackie Swartz [a,d], Torkel Falkenberg [a,b,*]

[a] *I C – The Integrative Care Science Center, Järna, Sweden*
[b] *Karolinska Institutet, Department of Neurobiology, Care Sciences and Society, Division of Nursing, Research Unit for Studies of Integrative Health Care, Huddinge, Sweden*
[c] *Karolinska Institutet, Department of Physiology & Pharmacology, Solna, Sweden*
[d] *Uppsala University, Department of Neuroscience, Uppsala, Sweden*

Received 25 March 2013; received in revised form 12 September 2013; accepted 13 September 2013

**Abstract**

*Introduction:* The concept of integrative medicine/care – often referred to as the *new medicine* – typically signifies a sound combination of safe and effective ancient traditional medicine or complementary and alternative medicine, and state-of-the-art conventional medicine. In this opinion article, we draw on a decade of research and development including our own experiences in low-, middle- and high-income countries, by means of qualitative and quantitative research approaches, and explore trends vital to the development of evidence-informed integrative care and communication systems.

*Discussion:* Proponents suggest that an integrative health care system with a diversity of therapeutic options – and no particular differentiation between any evidence-informed health care paradigms – might be the best way to revitalize health care and reduce societal health care costs. Opponents argue – based on reasoning common to followers of *scientism* – that such developments constitute pseudoscience and will effectively overburden the healthcare system. Integrating insights from medicine, the humanities, ethics and philosophy in a health care model, which combines high-tech conventional health care with ancient health care systems and therapies, with the aim to achieve a pluralistic, accessible, affordable, safe and effective health system is clearly a challenge, but one which in fact has been recommended by the Director General of the WHO.

*Conclusion:* To maintain a polarized situation in the light of the growing demand for person-centred health care services, is unhelpful to nations and patients alike, detrimental to therapeutic relationships and may even occasionally be dangerous.



*Keywords:* Integrative care; Health policy; Complementary and alternative medicine; Nursing; Scientism; Medical journalism

## Introduction

Increasing levels of chronic illness and escalating health care costs call for a re-vitalization of our modern health care systems. Moreover, there is a growing demand for high quality and safety in health services, with both patients and health care providers requesting that health care services be individualized and person-centred [1]. One health care model aiming to meet this growing demand for person-centred health care services is Integrative Care (IC). IC is also a response to the increasing use of complementary and alternative medicine (CAM), growing out of a concern that the concurrent use of conventional health care and CAM, without adequate knowledge on the part of practitioners, might jeopardize patient safety and satisfaction.

The terms used for defining CAM (including the constitutive methods, procedures and therapies) vary greatly. Recently, a definition pertinent to EU has been developed, whereby CAM is defined as follows: '*Complementary and alternative medicine (CAM) utilized 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 health care, but in some countries certain treatments are being adopted or adapted by conventional health care*.' However, developing a

* Corresponding author. Tel.: +46 70 6183868; fax: +46 8 55171165.
*E-mail address:* torkel.falkenberg@ki.se (T. Falkenberg).

1876-3820/$ – see front matter © 2013 Elsevier GmbH. All rights reserved.
http://dx.doi.org/10.1016/j.eujim.2013.09.005

uniform, pragmatic pan-European definition of CAM is complicated by a number of factors, including the vast diversity of legal frameworks, existing definitions, systems, disciplines, procedures, methods and therapies available within the EU [2].

The European Information Centre for Complementary & Alternative Medicine (EICCAM) states that over 100 million Europeans are currently user of CAM, one fifth of Europeans regularly uses CAM, and the same fraction prefers health care which includes CAM [3]. In the US, a consortium of academic health centres for integrative medicine comprises 50 highly esteemed academic medical centres and affiliate institutions, including Harvard, Stanford and Yale [4]. Globally, even higher numbers of users integrate and rely on diverse traditional and complementary health practices. The World Health Organization (WHO) has presented figures of up to 80% of populations in low and middle-income countries who use traditional medicine (TM) for primary health care [5].

Consequently, IC is increasingly evident in today's societies, with a multitude of integrative care or medicine services being offered in many countries across the world. Integrative care may be defined as "*. . .the practice of medicine that reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic approaches, healthcare professionals and disciplines to achieve optimal health and healing*." [4].

However, it should be emphasized that the conception and clinical application of what constitutes IC is not uniform. Rather, the term IC represents a range of different ambitions. The director of the National Centre for Complementary and Alternative Medicine Research (NCCAM) at the National Institutes of Health in the USA, describes integrative care as comprising "*holistic, gentle, patient-centred approaches that will solve many our Nation's most pressing health care problems*" [6]. At the other end of the spectrum, the Director argues that IC may also present itself as "*an evasive rebranding of modern equivalents of snake oil' by practitioners who raise unrealistic hopes and promote approaches that are not sensible, supported by evidence, or proven safe*" [6]. As with any health care service, it is obvious that the implementation and development of IC must be accompanied by rigorous evaluation, using appropriate research methodology.

In practice, a generic IC setting would be a health care service, where patients have access to both conventional and TM/CAM health care. Common TM/CAM therapies provided as part of IC services include acupuncture, herbal medicine, and manual therapies such as massage, osteopathy and chiropractic, to mention but a few. In addition, e.g. Anthroposophic medicine proponents even claim that their conceptual system has been a model of integrative medicine for more than 90 years [7] (whole-system TM modalities such as Ayurveda or Traditional Chinese Medicine are not as much integrative as alternative in that sense).

Conceptually, there are three basic types of relationships in which conventional health care practice and CAM may co-exist: opposition, integration and, pluralism [8]. Kaptchuk describes the principle of opposition between the different health care systems as outdated, since it is a threat to patient safety and disregards the needs of citizens [8]. In a pluralistic relationship, the two different systems exist side by side but with communication and collaboration between the two. In an integrative system on the other hand, practitioners with backgrounds in different healing traditions work together with an explicit or implicit assumption that it is possible to integrate the epistemological beliefs and practices from these different traditions.

In this opinion article, we draw on a decade of research and development (R&D) including our own experiences in low-, middle- and high-income countries, by means of qualitative and quantitative research approaches, to explore trends and challenges vital to the development of evidence-informed IC systems.

## International policy opportunities and challenges

Already in 1978, the WHO, in the Declaration of Alma Ata on Primary Health Care, appealed to the international community to support the inclusion of such TM/CAM that is considered effective and safe into national health systems, on the basis that they may benefit public health in low-income countries [9]. Although the term TM/CAM covers a wide range of therapies, which differ considerably from country to country, the more recent recommendations from the sixty-second World Health Assembly in 2009 advocate TM/CAM in order to strengthen health systems around the world and to meet Millennium Development Goals [10]. Thus, the Assembly, and the Beijing Declaration on Traditional Medicine [11] urge member states to consider including TM/CAM into their health systems, based on local priorities and capacities as well as on evidence of safety, effectiveness and quality [10].

The three year pan-European research network, CAMbrella [12], encompassing16 academic research groups (among them our own) from 12 European countries, aimed to evaluate the conditions surrounding CAM use and provision in Europe and developed a roadmap for future European CAM research. The most important results and recommendations were presented at the European Parliament in November 2012 [13]. Here, we could show that in recent years, leading CAM R&D outside of Europe seems to have undertaken a shift in research focus [14]. While the research in the 1990s was largely focused on efficacy and mechanism studies, the recent R&D activities analyzed by the CAMbrella initiative indicate a shift in research focus towards covering the whole spectrum of research, including context, effectiveness, safety, efficacy and mechanisms. It also became clear from our survey however, that the issue of strategic CAM R&D financing is a challenging topic to discuss in many countries, due to the inherent political nature of the CAM area. For example, there has been a spectrum of critical opinion regarding the NCCAM-funded research in the USA. At one end of the critical spectrum are claims that CAM approaches are inherently implausible and justified only by "pseudoscience", that peer-review processes in the CAM field are inferior, and that NCCAM funds proposals of dubious merit, that the field suffers from insularity, and that the research agenda is driven by political pressures rather than scientific considerations. At the