

What Attitudes and Needs Do Citizens in Europe Have in Relation to Complementary and Alternative Medicine?

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Keywords

Complementary and Alternative Medicine · Literature review · Attitudes · Needs · Information · Accessibility · Quality of care

Summary

Background: Surveys from several European countries suggest a European-wide increase in the use of Complementary and Alternative Medicine (CAM). To safeguard citizens' rights concerning their healthcare, it is critical to gain an overview of citizens' attitudes and to understand their expectations and needs regarding CAM. **Methods:** A review of literature was undertaken, based on systematic searches of the following electronic databases: PubMed, Web of Science, CINAHL, AMED, PsycINFO and PsycArticles; 189 articles met inclusion criteria. Articles were analysed thematically and their reporting quality assessed. **Results:** Despite the limited availability of research-based knowledge about citizens' attitudes and needs concerning CAM in many European countries, some trends can be noted. Many citizens hold positive attitudes to CAM and wish for increasing access to CAM provision. Citizens call for impartial, reliable and trustworthy information to support informed decision-making, and some citizens wish for greater support and involvement of biomedical healthcare professionals in facilitating their healthcare choices. While citizens value distinct aspects of CAM practice, they are also critical consumers and support clear regulatory and educational frameworks to ensure the quality and safety of CAM provision and medicinal products. **Conclusion:** To gain knowledge on citizens' needs and attitudes to CAM across Europe further research is required on 3 main issues: i) how citizens across Europe obtain information about CAM and the

needs they may have for trustworthy information sources, ii) the local situations for accessing CAM and iii) citizens' perspectives on the quality of care and safety of CAM provision and products.

Introduction

Surveys from several European countries suggest the increasing use of complementary and alternative medicine (CAM) over the last decades, with up to 70% of citizens having used CAM [1]. This means that a large majority of citizens need information about CAM to be able to make informed decisions about the use of CAM. It is therefore critical to gain an overview of citizens' attitudes to CAM and to understand their expectations and needs regarding CAM provision and medicinal products.

The aim of this literature study is to provide an overview of citizens' attitudes and needs concerning CAM in Europe, based on the current state of research-based knowledge. In this context, we use the following definitions: *Citizen*: any individual, irrespective of whether or not they have used CAM modalities in the past, may use them in the future or are current users; *Attitude*: a disposition or state of being for or against something that is associated with emotions, feelings and values; *Need*: the starting point for the consideration of health needs is the World Health Organization (WHO) understanding health as a human right, i.e. 'the enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being ...' (WHO constitution); *CAM*: where possible, the terms and understandings of CAM used by the author(s) of the identified articles were adopted in our reporting.

Table 1. Inclusion and exclusion criteria.

Inclusion criteria	Exclusion criteria
1 Design	1 no abstract
Quantitative	2 abstract not in English
Qualitative	3 presentation as abstract only
Literature reviews	4 outside EU (or Turkey, or Israel)
2 Participants	5 editorials, letters, opinion pieces
Citizens in the EU	6 duplicates
In any of the 39 EU countries	7 studies reporting on clinical treatment or treatment evaluation (e.g. RCTs, outcome studies)
All ages	
3 Languages	8 studies reporting on medicinal use of a single herb, herbal compound, homeopathic remedy, aromatherapy oil, natural substance or treatment technique for particular condition/s and/or by particular population group/s
Any EU language	

Table 2. Search terms

General search terms Searches 1 and 2	Specific search terms Search 1	Specific search terms Search 2
<i>CAM</i> PubMed: ‘Complementary therapies’ (MeSH ^a) Remaining databases: Complementary medicine* OR alternative medicine* OR complementary therap* OR alternative therap* OR integrative medicine* OR integrative therap*	<i>citizen</i> (OR synonyms) PubMed: humans (MeSH) remaining databases: Public, Population, Consumer, Inhabitant, Resident	all databases: information, quality of care, decision-making, disclosure, safety, access, cost, evidence, effectiveness, regulation
<i>Europe</i> PubMed: ‘Europe (MeSH) OR Turkey OR Israel’ Web of Science: Additional data base search facilities Remaining databases: Selection made following the reading of title, abstract, and (if needed) full articles	<i>attitude</i> (OR synonyms) PubMed: attitude to Health (MeSH) remaining databases: belief, awareness, acceptance, value, philosoph*, world view, choice, knowledge, inclination, perception, approach, outlook, position, opinion, point of view, openness	
	<i>need</i> (OR synonyms) all databases: Demand, Reason, Expectation, Motivation, Barrier, Requirement	

^aMeSH = Medical subject headings.

Methods

A review of literature was carried out based on systematic searches of the following electronic databases: PubMed, Web of Science, CINHALL, AMED, PsycINFO and PsyARTICLES, with date limits applied (January 1, 1989 to December 31, 2009). For inclusion and exclusion criteria, see table 1.

Two separate but related searches were carried out (for search terms, see table 2). The key themes used for selection of search terms were identified at a stakeholder workshop: citizens’ attitudes and needs concerning i) access to CAM, ii) information about CAM and iii) quality and safety of CAM provision.

Search 1 was based on keywords reflecting the above themes and identified 2,796 abstracts; 323 were considered further. Few of the identified abstracts related to citizens’ needs regarding CAM in Europe, when compared to the number of abstracts relating to – broadly speaking – citizens’ attitudes to CAM in Europe. A second search, Search 2, with additional keywords identified from the articles from Search 1 was therefore carried out, which identified 3,698 abstracts; 194 were considered further.

After removing duplicates, 338 abstracts were included for further

consideration. Full articles were retrieved and read, and further articles excluded; also excluded were non-systematic literature reviews and where only abstracts were available (see fig. 1). The remaining 189 articles were analysed thematically, based on identifying emerging categories, themes, and sub-themes [2].

The reporting quality in the articles was assessed according to internationally acknowledged standards [3, 4]. Systematic reviews were not subject to quality assessment and are included for discussion only. Based on the quality assessment, articles were grouped into 3 ‘reporting quality’ categories: high, medium and low.

Results

The attitudes and needs of citizens in Europe concerning CAM were researched in 18 of 39 EU member states and associated countries included in this review (see fig. 2). Substantial research-based knowledge is only available from the UK.

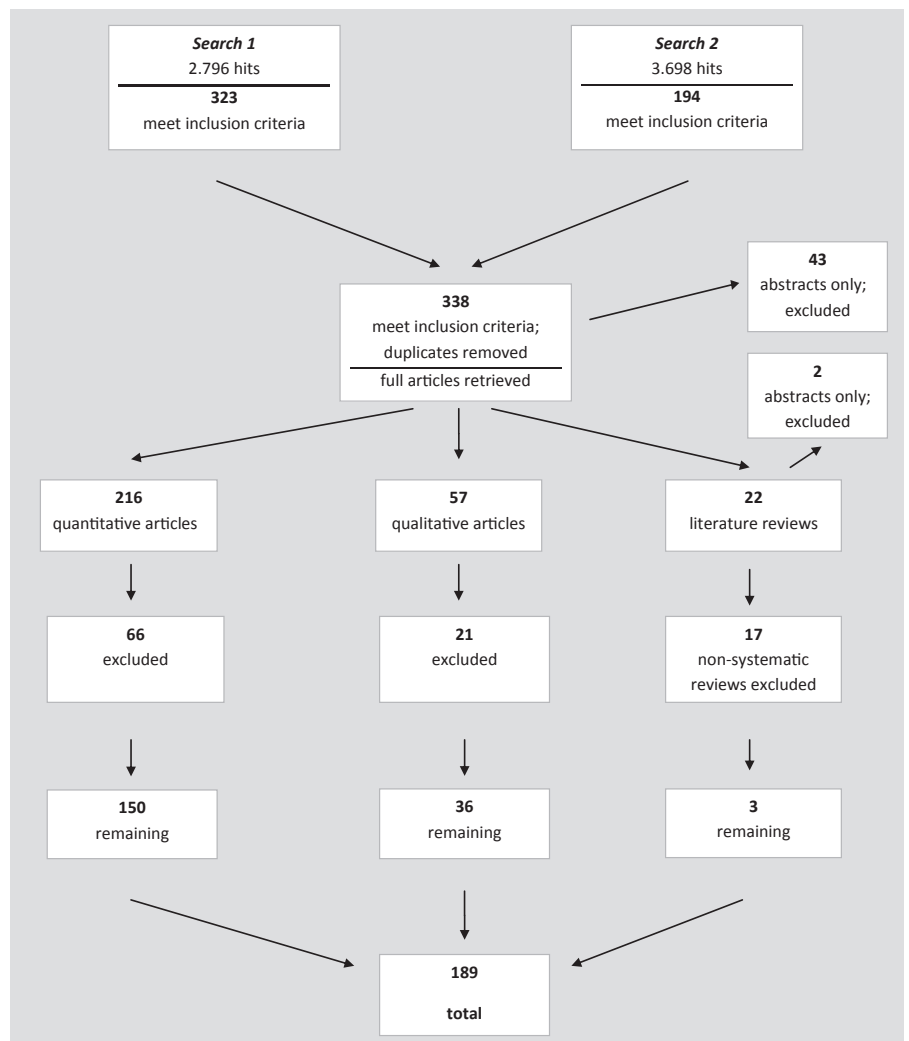


Fig. 1. Flowchart of identified abstracts and articles.

A medium number of articles were identified from Germany, Turkey, Israel, Switzerland, and Italy, and a small number from others; no peer-reviewed articles were retrieved for 21 countries. This means that countries are not explored in equal depth and over half are not examined at all. A further 5 articles reported Europe-wide studies, and 3 systematic reviews of literature examined literature internationally.

Of the articles, 37 investigated citizens' attitudes and needs explicitly, while 149 examined these topics as part of other research interests about CAM. Of these, 43 articles were considered of high, 96 of medium and 47 of low reporting quality, regardless of the quality of studies per se.

Access to CAM: A Complex Picture of Demands, Attitudes and Needs

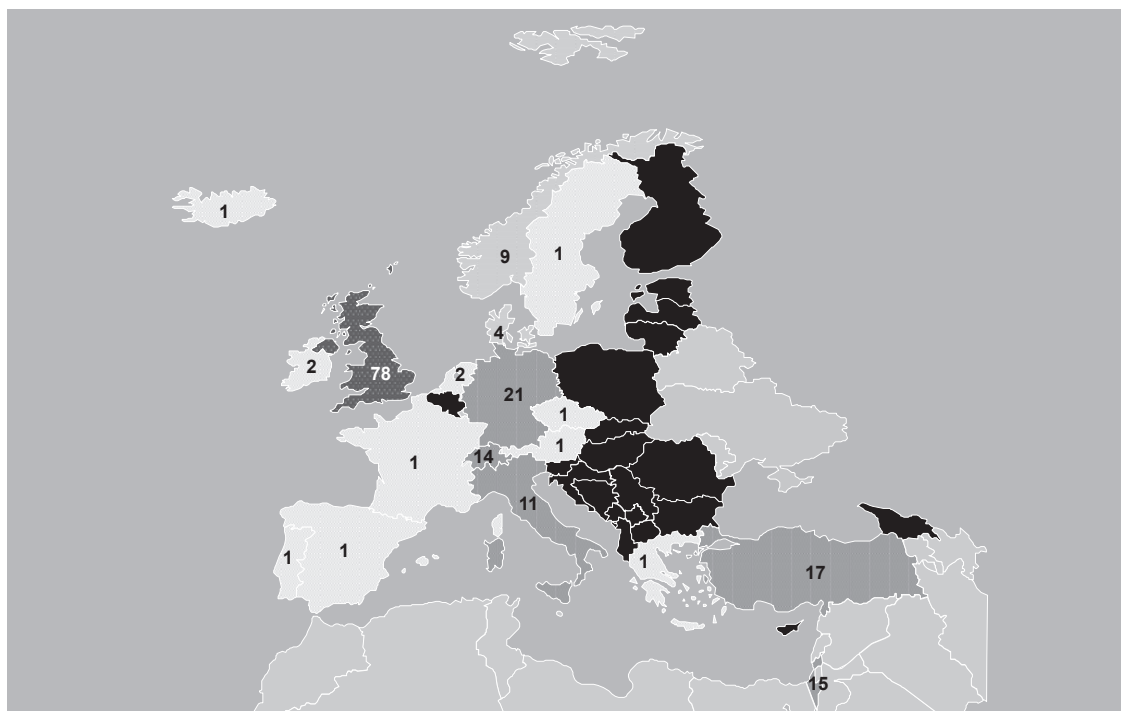
UK studies show that a majority of healthcare users (54–66%) supports the provision of CAM in the National Health Service [5–7], as does the majority of citizens (82–96%) in Israel [8, 9]. In Norway, between 43 and 63% of citizens feel that CAM should be an option for cancer patients in hospitals [10, 11], although only 5% of the general population think that general

practitioners (GPs) should recommend acupuncture for cancer patients [12]. In Germany and Switzerland, where CAM is often provided by GPs, close to 70% of primary care patients would like to be treated more frequently with CAM, especially by their GP [13, 14]. From the perspective of Italian physicians, patients express a high preference for CAM [15].

Several studies point to citizens' favouring diverse forms of CAM provision. For instance, UK and Israeli citizens support provision within and outside of public healthcare systems, e.g. receiving CAM from physicians with CAM training and CAM providers without biomedical training [9, 16, 17]. Such diversity is also supported by nearly half of UK primary healthcare workers [18].

Citizens experience multiple barriers when accessing CAM. A considerable barrier is the cost of CAM treatments paid for out-of-pocket when CAM is provided in the private sector. While some citizens, e.g. in the UK and Israel, are willing to pay for or contribute to the payment of CAM [5, 9, 19, 20], for others, such as some UK and Danish citizens, the cost of CAM may constitute a significant barrier [21–28]. In countries, such as Germany and Switzerland, where some CAM

Fig 2. Geographical distribution of articles across the EU. Black, Countries without any articles (n = 21). For countries with articles (n = 18), more articles with increasing levels of grey; numbers indicate number of articles.



treatments (or parts thereof) are reimbursed through health insurance schemes, variable reimbursement is shown to have implications for citizens' treatment choices as they predominantly choose reimbursable CAM therapies [14, 27]. This indicates that many citizens in Europe pay for their CAM treatments of choice, leading to differential access by diverse groups of citizens [29, 30]. Financial cost as a barrier to CAM is, however, not confirmed in EU-wide studies [31–33].

The attitudes of biomedical professionals (e.g. general practitioners, hospital clinicians, nurses, midwives and physiotherapists) to CAM also seem to form a barrier. Findings from the UK [16, 17, 34–36], Israel [9] and Switzerland [14] indicate citizens' wish for more support and knowledge about CAM from biomedical professionals. Biomedical professionals' lack of knowledge and support for citizens' interest in, and use of, CAM, as perceived by the citizens [37], may lead to non-disclosure of CAM in biomedical encounters, and constitute a significant barrier to accessing information about CAM or referrals to CAM provision via biomedical professionals.

A correlation can be tentatively drawn between the extent to which CAM is practised by biomedical professionals and citizens' disclosure of their interest in, or use of, CAM. Studies included in this review point to a spectrum of disclosure rates of CAM use in different EU countries that ranges from low disclosure, where the majority of CAM users do not discuss CAM with biomedical professionals (e.g. in Turkey [38–42]), to high disclosure, where the majority disclose their use of CAM (e.g. in Switzerland [43–45]). Countries in which CAM is often practised by biomedical professionals and where the practice is highly regulated (e.g. in Switzerland) ap-

pear to have higher disclosure rates. This indicates that biomedical attitudes to CAM influence the extent of discussion of CAM in biomedical encounters.

A link between the availability of information about CAM and citizens' non-use of CAM is reported from the UK [21, 46, 47], Germany [48, 49] and Italy [50]. This supports findings that suggest that the more information citizens have about CAM the higher their CAM use [51, 52], although this trend is not confirmed for all European countries [33].

Citizens' Information Sources about CAM

Two over-arching patterns can be identified in how citizens seek information about CAM: (a) citizens in some countries draw predominantly on their social networks of friends, family and other close associates as the main CAM information source; and (b) in countries where biomedical professionals are the citizens' main information source on CAM, social networks as information provider appear relatively less prominent. To a lesser extent, citizens also use the media and other sources [53].

The prominence of social networks as the main CAM information source is noted particularly, but not exclusively, in the UK [5, 7, 29, 35, 36, 54–59], Turkey [38, 39, 41, 42, 60–65], Israel [66–68], Norway [11] and Ireland [69], and is confirmed by studies examining CAM across a range of countries [33, 70–73]. Citizens in these countries appear to draw considerably less frequently on biomedical professionals for information about CAM. Qualitative studies confirm the importance of social networks [24, 25, 46, 74–80] and point to specific groups within social networks in directing individuals towards CAM: female family members of male cancer patients [74,

75]; older family members in the case of people of South Asian origin in the UK [79]; and Chinese migrant women's networks that span the UK and women's countries of origin [24]. While these studies unanimously highlight the centrality of social networks as CAM information sources, some studies from the UK [17, 74, 81–84] and Israel [9, 85, 86] also note that some citizens would like to receive information about CAM from biomedical professionals.

A second pattern of information seeking is noted in studies from countries where CAM is frequently practised by biomedical professionals. Here, biomedical professionals constitute a main information source about CAM, with social networks being relatively less prominent. This pattern is less explored and clear cut, although it is observed in Germany [87, 88] and Tuscany [89], but has not been confirmed for Italy as a whole [90] or for Germany [91]. Variations in the biomedical professional group and CAM therapy are noted in both countries [92–95].

Underpinning the information sharing through social networks is the importance of personal experience with CAM. Citizens' personal experience seems to influence initial and repeated use of CAM, as shown by studies from the UK [5, 21, 54, 74, 75, 79, 96], Ireland [69], Switzerland [14, 43, 97], Turkey [39], Israel [67], Germany [87, 91, 93], France [80], Norway [12] and Austria [98]. The trend of attitudes to CAM being shaped by personal CAM experience is also observed for biomedical professionals and students of biomedical professions [83, 99–105].

Quality and Safety of CAM: Citizens' Attitudes and Needs

Several studies show that citizens value the positive CAM provider-patient relationship and the patient-centred approach offered in many CAM consultations, where citizens perceive to have a voice in negotiating treatment options and to be enabled to take control of their own care. Communication between CAM users and providers critically contributes to this perception, particularly the experience of 'having time' for discussion and exploration and 'being listened to', compared to biomedical encounters, as noted in studies from the UK [22, 25, 58, 75, 106–109], Switzerland [110–113], Germany [114], Spain [115], Denmark [28] and France [80].

Citizens' appreciation of the values underpinning the practice of CAM is noted in several studies. The importance of personalised care, and the patient-centred and holistic approach advocated by CAM are particularly noted in the UK [19, 25, 58, 59, 116, 117], Norway [118], Germany [77, 119], Israel [120] and Switzerland [121]. Additionally, the provision of explanatory frameworks, which often constitute an integral part of the 'package of care' [23], can be central to the ways some CAM users make sense of their illness and its treatment [28, 80, 106, 109].

Some studies show that citizens are critical consumers who terminate treatment if they are dissatisfied with the treatment

process and/or their relationship with the CAM provider. Reasons for discontinuing CAM treatments include similarities between CAM and biomedical treatments, lack of anticipated involvement and/or independence in decision-making concerning treatment options, an unexpected 'foreignness' of CAM, and a lack of information given by CAM providers [70, 122–124].

Citizens' stance as critical consumers is also noticeable with regard to the safety of CAM, as citizens do not automatically assume the safety and quality of CAM provision [54, 79]. Although studies show that many citizens across Europe perceive CAM and/or CAM products as 'natural' and, therefore, safer than biomedical treatment, and/or as not involving risk and/or side-effects [7, 16, 28, 32, 35, 43, 44, 46, 50, 61, 62, 64, 78, 79, 91, 120, 121, 124–132], several of these studies also indicate that citizens are critical, and at times doubtful, about CAM safety and efficacy [16, 79, 130, 131]. The historical use of acupuncture and herbal medicine is particularly argued to explain their safety [16, 75]. Citizens' perceptions of CAM as generally safe are often reinforced by their personal experience [33, 66, 70, 133–136] and supported by some research [137–140].

To assess and aim to ensure the quality of CAM, citizens draw on distinct strategies. Some studies show how citizens look for CAM endorsement and legitimacy conferred through biomedicine, such as receiving information about CAM from biomedical professionals [75, 84], favouring CAM provided through public health services [21, 34, 75] or by GPs [13, 14], or wishing for a GP referral to CAM providers [9]. Provider registration with professional CAM organisations increases UK citizens' trust in CAM provision [6, 16], a trend that has gained importance over time [6]. UK citizens also refer to CAM provider qualifications to ascertain the safety and potential quality of provision [6, 74]. Other citizens may trust the CAM services they use because they are provided by biomedical professionals, even though not all biomedical CAM providers have certified training in the CAM therapies they practise [15, 89, 102]. These findings reflect the opinions of key decision makers in German medical schools who associate the risks of CAM primarily with inadequate quality control of CAM provider training and the undifferentiated use of CAM by biomedical professionals [99].

Discussion

This literature study identified research-based literature on citizens' attitudes and needs concerning CAM in 18 of 39 EU member states and associated countries. The topic is largely examined indirectly, with poor reporting quality of many articles. These limitations highlight that citizens' attitudes and needs concerning CAM in Europe remain under-studied. Accordingly, the findings presented are only indicative of the European situation, and suggest tendencies rather than well-

established facts regarding citizens' needs and attitudes towards CAM in Europe.

A relevant context for a discussion of the identified tendencies and need for future research in this area is EU health policy, which is underpinned by an understanding of health as a human right, and a commitment to citizens' engagement and a patient-centred approach to addressing health issues across Europe [141]. Of particular relevance is the Second Programme of Community Action in the field of health (2008–2013), which acknowledges the importance of CAM for citizens' healthcare: 'The Programme should recognise the importance of a holistic approach to public health and take into account (...) complementary and alternative medicine in its actions' [142]. Given this acknowledgment, it is worthwhile considering how well citizens' attitudes and needs concerning CAM are investigated in relation to relevant EU health policies.

Our findings indicate that the wish of many citizens to make an informed decision about their healthcare by drawing on reliable, trustworthy and diverse sources of information about CAM remains unmet. This contrasts with a central EU objective emphasizing the need to increase the citizens' ability to make better decisions about their health and be protected from risks and threats to health that are beyond their individual control [143]. Thus, research on how to disseminate research-based knowledge on CAM best would support a fulfilment of this policy aim and further strengthen the citizens' ability to share responsibility for their health, as proposed by the EU [144].

There are indications that citizens wish to gather information about CAM from biomedical professionals, at least in some instances, while other research points to other strategies of information-seeking. Research investigating citizens' needs for reliable and trustworthy information about CAM on a Europe-wide basis would be relevant. Although the importance of information on CAM is acknowledged in EU health policies, such recognition may not be shared across all EU healthcare systems.

The cost of CAM paid for out-of-pocket constitutes a barrier to CAM use for many citizens. This contrasts with the values of universality, access to good quality care, equity and solidarity, which underpin EU health policies and aim to ensure equal access to healthcare according to need, regardless of ethnicity, gender, age, social status or the ability to pay [145]. The cost of CAM as a barrier to its use is, however, not confirmed across all European countries [31–33], which highlights the importance of examining citizens' access to individual CAM therapies in specific local contexts, their reasons for

paying for CAM, and the specificity of local meanings of the term CAM.

The findings highlight that many citizens in Europe value the practice of CAM, particularly the CAM provider-patient relationship, and the patient-centred and holistic approach aspired to by many CAM providers. It would be valuable to explore to what extent CAM across Europe is characterized by these values and whether there are differences when CAM is provided by biomedical professionals or other CAM providers. The patient-centred care is in line with EU health policy that aims to shift responsibilities for health from health care providers to citizens [146]. Citizens are critical consumers of CAM, particularly with regard to the quality and safety of CAM provision, and form their own judgments about acceptable risks concerning CAM, although their assessment of these risks may differ from the sources and understandings of evidence used by biomedical professionals and health policy makers. This calls for more research into citizens' perspectives on the quality of care and safety of CAM provision and products.

Conclusion

Citizens' needs and attitudes to CAM have only been researched in half of the countries associated with the EU. Given the scarcity or lack of research-based literature on citizens' needs and attitudes to CAM in Europe and in light of EU health policies, further research is needed to examine how citizens across Europe obtain information about CAM and the needs they may have for trustworthy information sources. Further, we need research on local situations for accessing CAM and on citizens' perspectives on the quality and safety of CAM products and provision across Europe.

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