Complementary and Alternative Medicine: Knowledge and Attitudes among Dermatologists

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Sir,
The prevalence of complementary and alternative medicine (CAM) use among patients with skin diseases ranges between 35% and 69% in Western countries (1, 2). The use of some CAM has been associated with adverse reactions, drug interactions and low adherence to prescription drugs (1, 3–5). Thus, the importance of an open doctor–patient discussion on CAM has been repeatedly highlighted (2, 3). Despite the high prevalence of CAM use, there is very limited data on dermatologists' attitudes and knowledge about CAM. One study (6) included an evaluation of dermatologists' communication and attitudes about CAM, showing that dermatologists had a low ability to predict CAM use in their patients, and in the majority of cases CAM use was not discussed.

The aim of the present survey was to evaluate dermatologists' knowledge, attitudes, and doctor–patient communication regarding CAM use for skin diseases.

METHODS

A cross-sectional survey was conducted including all 61 dermatologists working at the outpatient clinics of the Istituto Dermopatico dell'Immacolata (IDI), Rome, Italy, a dermatological referral centre for central and southern Italy. In February–March 2006, dermatologists were invited to self-complete an anonymous questionnaire, including 28 pre-coded questions on knowledge, attitudes and doctor–patient communication regarding CAM. In agreement with the definition of the American National Center for CAM (NCCAM) and the National Institute of Health, CAM were defined as healthcare systems, practices and products not currently considered part of conventional medicine. The study questionnaire was developed based on a literature review (1, 3, 6–9) and adapting the questions to our specific objectives and context. Dermatologists were asked to indicate CAM treatments they recommended, selecting them from a pre-coded list (acupuncture; phytotherapy/herbal medicine; homeopathy; manipulative therapies; dietary supplements not including vitamins; thermal therapies; others). Knowledge was assessed by asking 9 questions on clinically relevant information about CAM (e.g. identify possible adverse reactions of herbal treatments described in the literature from a pre-coded list). Absolute confidentiality was guaranteed to all participants. The study protocol was approved by the institutional ethics committee.

Groups were compared using Fisher's exact test. Significance was set at $p < 0.05$. Multivariate logistic regression was used to analyse the association between dermatologists' positive attitude towards an open doctor–patient discussion on CAM and potential explanatory variables (e.g. knowledge level, personal CAM use, etc.). The software STATA 9 (Stata Corp LP, College Station, TX, USA) was employed for statistical analyses.

RESULTS

Among the 61 dermatologists, all but one returned a completed questionnaire (response rate 98%). Sixty percent were men, 21.7% were <40 years old, 38.3% 40–49 years, 40% ≥ 50 years old. Two dermatologists had attended courses on CAM (acupuncture and herbal medicine). Among participating dermatologists 88.3% reported that patients asked them for advice or information on CAM, most frequently regarding CAM use for psoriasis (56.6% of cases), eczema/dermatitis (35.9%), allergies (26.4%), acne (20.8%), and hair loss (17.0%).

Possible CAM-related adverse reactions were observed by 58.3% of dermatologists, most frequently in association with herbal (28.6%) and homeopathic treatments (17.1%). Adverse reactions included dermatitis (51.4%), worsening of a pre-existing skin problem (20.0%), allergic reactions (8.6%) and photodermatitis (5.7%).

Among dermatologists, 30% considered it unnecessary that patients informed and discussed CAM use with them, mainly because they considered CAM not effective (33.3%) and because they believed that doctors' knowledge on CAM is insufficient (27.8%). Examining attitudes regarding CAM has shown that for 40% of dermatologists CAM can complement but cannot be an alternative to conventional therapies; 27% of dermatologists consider CAM as a possible alternative to conventional therapies, 18% consider CAM useful to improve quality of life and 12% thought CAM should never be used. None of the dermatologists directly practiced CAM as part of their clinical activity; however, 25% of them occasionally recommended CAM, mainly for psoriasis (40.0%), neuropathies (40.0%), acne (40.0%), dermatitis (26.7%), hair loss (26.7%) and pruritus (20.0%). They most frequently recommended acupuncture, dietary supplements, thermal and herbal treatments.

Personal CAM use was reported by 26.7% of dermatologists and included dietary supplements (37.5%), manipulative therapy (37.5%), acupuncture (31.3%), homeopathy (12.5%) and herbal treatments (6.3%). The main reasons for CAM use were that conventional treatments had not been satisfactory (41.2%), CAM had fewer adverse reactions (29.4%), CAM was believed more effective (23.5%) and it represented the only treatment option for their health problem (17.7%).

Evaluating dermatologists' knowledge on CAM showed a median number of correct answers of 3 (range

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0–7). The lowest proportion of correct answers regarded the question on the possible effect of some CAM on the immune system (correctly answered by 5.0% of dermatologists); 11.7% of dermatologists knew that heavy metals (e.g. lead, mercury, arsenic) may be present in some herbal products; 35.0% knew about the possible interaction between CAM and prescription drugs. The highest proportion of correct answers (78.3%) regarded the question on the possible occurrence of dermatitis as an adverse reaction to herbal treatments. We found a higher prevalence of good knowledge among dermatologists personally using CAM (50.0%) compared with those never using them (34.9%) and among those recommending vs. not recommending CAM (46.7% vs. 35.6%), but not at significant levels. An interest in learning more about CAM was reported by 50.8% of participants.

Multivariable analysis has shown that dermatologists with a higher knowledge level, personally using CAM and having recommended CAM to patients had a significantly higher likelihood of recognizing the importance of an open doctor–patient discussion on CAM (Table I).

Table I. *Factors potentially associated with dermatologists having a positive attitude regarding an open doctor–patient discussion on complementary and alternative medicine (CAM): results from univariate analysis and multivariable logistic regression*

Characteristics	Yes ($n=34$)[a] n (%)	No ($n=26$)[a]	Total ($n=60$)[a]	p-value[b]	OR (95% CI)[c]	p-value
Sex						
Male	19 (52.8)	17	36			
Female	15 (62.5)	9	24	0.60		
Age group, years						
<40	7 (53.9)	6	13			
40–49	13 (56.5)	10	23			
≥50	14 (58.3)	10	24	1.00		
Knowledge level regarding CAM						
Low (<4)	17 (46.0)	20	37		1	
High (≥4)	17 (73.9)	6	23	0.06	3.47 (1.07–11.3)	0.04
Personal CAM use						
No	20 (46.5)	23	43		1	
Yes	14 (87.5)	2	16	0.01	7.66 (1.52–38.6)	0.01
Recommended CAM in clinical practice						
No	21 (46.7)	24	45		1	
Yes	13 (86.7)	2	15	0.01	7.78 (1.52–39.9)	0.01
Observed potential adverse reactions						
No	10 (41.7)	14	24		1	
Yes	23 (65.7)	12	35	0.11	2.41 (0.79–7.37)	0.12
Patients requested information on CAM						
No	2 (28.6)	5	7		1	
Yes	32 (60.4)	21	53	0.22	5.61 (0.84–37.6)	0.08
Interested in CAM specific education						
No	14 (48.3)	15	29		1	
Yes	20 (66.7)	10	30	0.19	2.60 (0.84–8.08)	0.10

[a]Totals may vary because of missing values.
[b]Fisher's exact test.
[c]Multivariable logistic regression: odds ratio (OR) adjusted for age and sex.

DISCUSSION

Our study has shown important knowledge gaps regarding clinically relevant CAM information among our sample of Italian dermatologists. A substantial proportion of dermatologists is interested in learning more about CAM, which is in agreement with surveys reporting 60% of physicians interested in CAM education (10). Overall, dermatologists' attitudes towards CAM were positive, with only a minority stating that they should never be used. Moreover, the majority of dermatologists reported that patients asked them for advice on CAM and many had observed possible CAM-associated adverse reactions. It is noteworthy that despite the high CAM awareness, 30% of dermatologists considered a doctor–patient discussion on CAM not useful, mainly because they consider CAM not effective and because they believe that doctors' knowledge on CAM is insufficient. These results are in line with studies including general practitioner and other specialists, showing little propensity of doctors to discuss CAM use with patients, due to similar considerations (8, 11).

Interestingly, patients provide similar explanations for not disclosing CAM use to their physician, i.e. concern about disapproval, belief that the physician has inadequate CAM knowledge, physicians do not enquire about it, etc. (7, 8, 12, 13). A recent study reported that only 16.9% of people using CAM for skin problems informed their physician (2). Recommendations to physicians have highlighted the importance of improving communication on CAM creating an open dialogue and explicitly asking patients about CAM use (3, 7, 9). Concepts of "evidence-based medicine" and risk-benefits should also be communicated to patients when discussing treatment options (12).

Dermatologists were recruited from a single centre, thus caution should be exercised in generalizing our findings. However, our study was conducted in a dermatological referral centre and all but one eligible dermatologist participated in the survey.

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