

Factors driving the use of dermoscopy in Europe: a pan-European survey

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Summary

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Background When used correctly, dermoscopy is an essential tool for helping clinicians in the diagnosis of skin diseases and the early detection of skin cancers. Despite its proven benefits, there is a lack of data about how European dermatologists use dermoscopy in everyday practice.

Objectives To identify the motivations, obstacles and modifiable factors influencing the use of dermoscopy in daily dermatology practice across Europe.

Methods All registered dermatologists in 32 European countries were invited to complete an online survey of 20 questions regarding demographic and practice characteristics, dermoscopy training and self-confidence in dermoscopic skills, patterns of dermoscopy use, reasons for not using dermoscopy and attitudes relating to dermoscopy utility.

Results We collected 7480 valid answers, of which 89% reported use of dermoscopy. The main reasons for not using dermoscopy were lack of equipment (58% of nonusers) and lack of training (42%). Dermoscopy training during residency was reported by 41% of dermoscopy users and by 12% of nonusers ($P < 0.001$). Dermatologists working in public hospitals were the least likely to use dermoscopy. High use of dermoscopy across the spectrum of skin diseases was reported by 62% of dermoscopy users and was associated with dermoscopy training during residency, the use of polarized light and digital dermoscopy devices, longer dermoscopy practice, younger age and female gender.

Conclusions Expanding access to dermoscopy equipment, especially in public healthcare facilities and establishing dermoscopy training during dermatology residency would further enhance the substantially high dermoscopy use across European countries.

What's already known about this topic?

- Dermoscopy is a well-established tool for the noninvasive diagnosis of skin diseases.
- The benefits of dermoscopy depend on correct use by trained physicians.
- Although considered to be widely used in Europe, reports on dermoscopy use by dermatologists have been carried out in only two European countries so far.

What does this study add?

- Our study is the first pan-European survey of dermatologists regarding the patterns of use, training and attitudes towards dermoscopy.

- We report on the demographic, practice- and training-related factors driving or hampering the use of dermoscopy in the daily practice of dermatologists in 32 European countries.

Dermoscopy has become an essential tool for the early detection of skin cancers and noninvasive dermatological diagnosis.^{1,2} It is considered to be widely used in Europe; however, reports on dermoscopy use by dermatologists have been carried out in only two European countries so far,^{3–5} compared with broader analysis in Australia^{6,7} and the U.S.A.^{8–11}

While skin cancer incidence continues to rise, important differences in skin cancer burden have been reported across Europe,^{12–15} with late diagnosis, underdiagnosis and poorer prognosis reported in many Central and Eastern European countries.^{12,16} Moreover, it is estimated that half of the worldwide melanoma deaths occur in European countries. Dermoscopy, as an established, easy-to-use and accessible technique of *in vivo* skin visualization, may contribute towards improving early detection of skin cancers and alleviating these disparities.

Dermoscopy has evidence-confirmed benefits for increasing the accuracy of skin cancer diagnosis. It increases clinicians' accuracy in melanoma detection^{1,17–19} and can reduce the number of unnecessary biopsies of benign lesions.^{20–23} Dermoscopy also supports the *in vivo* differentiation of a wide range of pigmented and nonpigmented skin tumours,^{24,25} and its role in distinguishing neoplastic from inflammatory lesions is expanding.^{26–28} Consequently, dermoscopy is considered the standard of care for skin cancer diagnosis and monitoring of high-risk groups and is included in the current clinical practice guidelines worldwide.^{29–32} Yet its benefits depend on correct use by experienced and trained physicians.¹⁸ Thus, it is important to understand the patterns of dermoscopy use across Europe, the obstacles to its optimal use and the pathways by which this technique could be made available for a wider proportion of European dermatologists in order to enhance the noninvasive diagnosis of skin diseases.

Towards this goal, we conducted the first pan-European analysis of the use of dermoscopy by dermatologists, seeking information on the motivations, barriers and modifiable factors related to the use of dermoscopy in the daily practice across the continent.

Materials and methods

The study consisted of a survey of European dermatologists, conducted under the auspices of the International Dermoscopy Society (IDS).

Study instrument

The study questionnaire was developed by the study's task force experts (G.A., A.M.F., H.P.S., I.Z., A.C.G. and V.M.), in agreement with the IDS guidelines and literature-reported practices.^{5,7} The questionnaire comprised a core of 20

multiple-choice questions (Appendix S1; see Supporting Information) regarding demographic and practice characteristics, dermoscopy training and use patterns, opinions about dermoscopy utility and self-reported confidence in dermoscopic diagnosis. The questionnaire excluded personal identification questions and was translated into the languages of all participant countries.

Study participants

The study was intended for all licensed dermatologists registered in European countries defined by the United Nations Organization classification.³³ In each participating country, a National Coordinating Team (NCT), led by a National Coordinator (NC), took the responsibility of implementing the study, collaborating with national dermatology and dermoscopy professional associations. NCs were members of the IDS Board of Directors, or Country Coordinators of the Euromelanoma campaign³⁴ for the countries without an IDS Board representative. The responsibilities of the NCs included accessing the national databases of dermatologists, obtaining the necessary study approvals at national level, communicating the number of dermatologists officially registered in the country, survey translation, survey dissemination solely to registered dermatologists nationwide, motivating dermatologists to participate, collecting offline responses and participating in the reporting of study results.

Participating countries

A total of 39 countries in the Europe region³³ were invited to participate and three additional countries (Turkey, Israel and Georgia) joined the study as part of the Council of Europe.³⁵ An effective National Coordination was established in 33 countries; one country (Ukraine) could not complete the study owing to political instability. A total of 32 countries completed the study and data from the following countries are included in the present analysis: Austria, Belgium, Belarus, Bosnia-Herzegovina, Bulgaria, Czech Republic, Croatia, Estonia, France, Germany, Georgia, Greece, Hungary, Ireland, Israel, Italy, Latvia, Lithuania, the former Yugoslav Republic of Macedonia, Norway, the Netherlands, Portugal, Romania, Russia, Serbia, Slovenia, Slovak Republic, Spain, Sweden, Switzerland, Turkey and the U.K.

Survey dissemination

Survey dissemination occurred through the IDS web-based platform for online surveys. For each participating country a dedicated webspace was created, accessible by a

country-specific link and containing the electronic survey translated in the country's language. The country access link was communicated by each NC to all registered dermatologists in the respective national database. NCTs had the option to use additional offline methods for survey dissemination (post, e-mail, etc.) fulfilling the study criteria, i.e. anonymity, restriction to nationally registered dermatologists and avoidance of duplicate responses. Slovenia and Lithuania conducted the survey offline only. Offline data were introduced manually into electronic databases using Microsoft Excel (Microsoft Corporation, Redmond, WA, U.S.A.) by the respective NCTs, verified by a study task force member and merged with the central study database.

Survey collection

Dermatologists in each country used the country-specific link to access the online questionnaire and were instructed to complete the survey only once. The survey was anonymous and only responders answering 'yes' to Question 9 ('Do you use dermoscopy?') could proceed to later questions regarding the practice of dermoscopy use. The IDS online survey platform was open between 1 July 2014 and 1 December 2014, during which period NCTs sent four reminders to all dermatologists in their contact databases. Online responses were collected in an access-restricted central database, grouped by country access code. They were subsequently merged with the electronic databases of offline responses transmitted by the NCTs.

Data processing

Data cleaning of the study database was performed by three independent investigators (A.M.F., P.T. and G.G.) who eliminated empty entries, duplicate entries (same IP address, sex, age, practice settings), technical error entries and invalid answers defined as missing or unrealistic answers in any of Questions 1–8.

Statistical analysis

Answers to Questions 1–18 are analysed in the present work. Continuous data are given as mean and SD unless stated otherwise, and parametric tests for comparing groups were used only if corresponding assumptions were met. Comparing proportions of two groups χ^2 -test and comparing proportions of ordered groups χ^2 -test for trends in proportions were used. For multivariate analysis all variables that were significant in the univariate analysis were entered using a model with backwards elimination, controlled for sex, age, years in practice and numbers of patients with skin cancer and overall number of patients seen per month. Remaining predictors are given as odds ratios with 95% confidence intervals. Questions regarding confidence in using dermoscopy and advantages of dermoscopy were rated on a 3-point Likert scale. To differentiate 'high' dermoscopy users from 'low' dermoscopy users, a score was created by summarizing levels of percentages of indicated

use in the three categories of inflammatory, pigmented and nonpigmented skin lesions (Question 15), where a score of between 1 and 5 points could be obtained in every category. The summarized score could range from 3 to 15 points, and was separated into two groups ('high' and 'low' users) by k-means clustering. Those who reached the cut-off of 11 points were classified as 'high users' who used dermoscopy in at least two application fields more than 50% of the time.

A $P < 0.05$ was regarded as statistically significant; in univariate analysis P -values were adjusted using the method described by Holm.³⁶ All statistical computation and generation of graphics were performed using R (<https://www.r-project.org>) with the packages ggplot2³⁷ and Likert (<https://cran.r-project.org/package=likert>).

Results

The study included 32 European countries, in which a total number of 38 300 dermatologists were registered by the relevant national health authorities, as reported by the NCTs. A total of 8297 online responses and 222 offline responses were collected. The response rate, defined as the proportion of respondents divided by the total number of certified dermatologists in each country, ranged from 7% to 69.7% and had a median value of 33.2% for all participating countries. After data cleaning, a total of 7480 valid responses were maintained for analysis.

Factors associated with use of dermoscopy by European dermatologists

The majority of respondents were women (69%), and the mean age was 46.7 years. Overall, 89% of respondents reported using dermoscopy, with a slightly lower proportion of women in the dermoscopy users group (68% vs. 79%, $P < 0.001$). In the univariate analysis and multivariate analysis, using dermoscopy was significantly associated with the following: working in a private individual practice or in a university hospital, involvement in teaching activities, higher number of patients and higher number of patients with skin cancer seen monthly (Table 1). Dermoscopy users reported having received dermoscopy training during residency more frequently than nonusers of dermoscopy (41% vs. 12%, $P < 0.001$) and also having received any type of other dermoscopy training. Almost 50% of nonusers reported that they had not received any type of dermoscopy training. Working in public healthcare facilities was associated with a lower rate of dermoscopy use.

Reasons for not using dermoscopy

Among the 822 dermatologists not using dermoscopy, the main reasons for not using this technique were the lack of equipment (not available or too expensive) and a lack of education (no dermoscopy training or not being confident in their own dermoscopy skills) (Fig. 1). Cost played a lesser

Table 1 Factors associated with the use of dermoscopy

	Dermoscopy users	Nonusers	P-value	P-value (multivariate) ^a
N = 7424	6602 (88.92)	822 (11.08)		
Female participants	4442 (67.66)	643 (78.8)	< 0.001	0.001
Age, years, mean (SD)	46.95 (11.01)	43.7 (11.96)	< 0.001	
Place of work				
Individual private practice	2517 (38.12)	141 (17.15)	< 0.001	0.001
Private ambulatory/hospital	1340 (20.30)	205 (24.94)	0.060	
Public ambulatory/hospital	2026 (30.69)	440 (53.53)	< 0.001	< 0.001
University hospital	1387 (21.01)	78 (9.49)	< 0.001	0.011
Involved in teaching activity for dermatology residents	844 (12.78)	71 (8.64)	0.021	
No. of years as a dermatologist, mean (SD)	16.17 (10.72)	14.92 (10.98)	0.063	
No. of patients seen per month, mean (SD)	433.21 (405.58)	275.91 (294.29)	< 0.001	< 0.001
No. of patients with skin cancer seen per month, mean (SD)	58.65 (107.11)	8.85 (39.33)	< 0.001	< 0.001
Dermoscopy training during residency	2709 (41.64)	97 (12.02)	< 0.001	< 0.001
Types of dermoscopy training outside of residency				
Dermoscopy course	4162 (63.04)	120 (14.60)	< 0.001	< 0.001
Online dermoscopy course	1202 (18.21)	41 (4.99)	< 0.001	< 0.001
Attended conferences congresses	4721 (71.51)	213 (25.91)	< 0.001	< 0.001
Books and atlases	5289 (80.11)	268 (32.60)	< 0.001	< 0.001
Mentor tutor	1537 (23.28)	58 (7.06)	< 0.001	< 0.001
No training	220 (3.33)	395 (48.05)	< 0.001	< 0.001

Overall, 56 of 7480 participants gave no valid answer to the grouping Question 9 (Do you use dermoscopy?). ^aVariables without a P-value in this column were not significant in multivariate analysis and were not entered to the model as they did not improve the regression model. Continuous data are given as mean with SD, proportions as n (%).

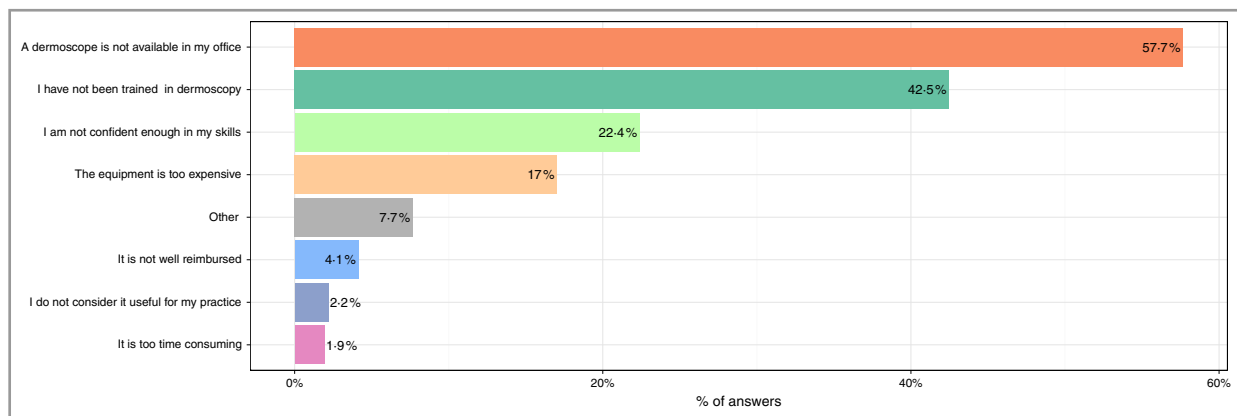


Fig 1. Reasons for not using dermoscopy reported by European dermatologists.

role (17%) and reimbursement did not appear to be important. The vast majority of those not using dermoscopy (98%) still regarded it as a useful technique.

When the results were stratified by practice setting, the most common reason for not using dermoscopy given by dermatologists working in individual private practices and public healthcare facilities was the lack of equipment (Fig. S1; see Supporting Information).

Factors related to high use of dermoscopy

Almost two-thirds of all dermoscopy users (62%) were also 'high users' of dermoscopy (as defined above). In the univariate analysis (Tables 2 and 3), high use of dermoscopy was significantly associated with slightly lower age and shorter duration of dermatology specialist practice, working in individual private practice, a higher number of patients with skin

cancer seen per month, having received dermoscopy training during residency, and having received any type of dermoscopy training. Dermatologists reporting high use of dermoscopy were more likely to report the use of polarized light devices or digital dermoscopy devices compared with low users of dermoscopy, and were more likely to use pattern analysis or no predefined dermoscopic algorithm. High use was also associated with a longer duration of dermoscopy practice, with positive views on dermoscopy and with higher confidence in diagnostic skills across all categories of skin lesions (Table S1; see Supporting Information).

The overall number of patients seen or the use of contact immersion dermoscopy did not differ significantly between high and low users of dermoscopy. Working in public hospitals (except university hospitals) was associated with lower use of dermoscopy.

For both high and low users of dermoscopy, the education methods most frequently reported outside residency training were books and atlases (83% and 76%, respectively), followed by attending conferences and formal dermoscopy courses. A smaller proportion of high and low users (26% and 19%, respectively) benefited from having a mentor or tutor teaching, and up to one-fifth took advantage of online courses.

In the multivariate analysis, high use of dermoscopy remained significantly associated with female gender, having received online dermoscopy training, using polarized light

and digital video-dermoscopy systems, longer practice, with using pattern analysis but not the ABCD rule (Tables 2 and 3) and also with a positive opinion about the benefits of dermoscopy and self-confidence in their dermoscopic diagnosis skills required for detecting nonpigmented skin tumours (Table S1; see Supporting Information).

Discussion

This study is the first pan-European analysis of the patterns of dermoscopy use by dermatologists. With 7500 responses, representing one in every five dermatologists registered in 32 European countries, this is the largest survey to date and it offers a unique view of the factors modulating the use of this technique across the continent. Thus, it provides a valuable knowledge base for future strategies to enhance the use of dermoscopy towards achieving improved diagnosis of skin diseases and early detection of skin cancers in Europe.

While recognizing the limitations of a lack of response from many European dermatologists, our study suggests that dermoscopy is well-established in dermatology practice across Europe. Still, 11% of participating dermatologists do not use dermoscopy, a proportion higher than that previously reported.^{4,5} Notably, the main reasons for not using dermoscopy include the lack of education and equipment, but not the lack of time, interest for the technique or financial

Table 2 Demographic and practice setting factors associated with high use of dermoscopy

	High dermoscopy users	Low dermoscopy users	P-value	P-value multivariate ^a
N = 6118	3830 (62.60)	2288 (37.40)		
Female participants	2594 (68.07)	1487 (65.28)	0.162	0.016
Age, years, mean (SD)	46.3 (10.74)	48.09 (SD: 11.32)	< 0.001	
Place of work				
Individual private practice	1606 (41.93)	750 (32.78)	< 0.001	
Private ambulatory/hospital	722 (18.85)	488 (21.33)	0.142	
Public ambulatory/hospital	1092 (28.51)	766 (33.48)	< 0.001	
University hospital	819 (21.38)	495 (21.63)	1.000	
Involved in teaching activity for dermatology residents	502 (13.11)	290 (12.67)	1.000	
Years as dermatology specialist, mean (SD)	15.39 (10.49)	17.42 (10.95)	< 0.001	
No. of patients seen per month, mean (SD)	444.86 (395.28)	427.18 (420.72)	0.428	
No. of patients with skin cancer seen per month, mean (SD)	66.74 (117.87)	49.25 (92.55)	< 0.001	0.033
Dermoscopy training during residency	1727 (45.63)	810 (35.89)	< 0.001	
Types of nonresidency dermoscopy training				
Dermoscopy course	2581 (67.39)	1323 (57.82)	< 0.001	
Online dermoscopy course	809 (21.12)	326 (14.25)	< 0.001	0.025
Attended conferences/congresses	2901 (75.74)	1533 (67.00)	< 0.001	
Books and atlases	3186 (83.19)	1753 (76.62)	< 0.001	
Mentor tutor	1003 (26.19)	431 (18.84)	< 0.001	
No training	97 (2.53)	100 (4.37)	0.001	

^aVariables without a P-value in this column were not significant in multivariate analysis and were not entered into the model as they did not improve the regression model. Continuous data are given as mean with SD, proportions as n (%).

Table 3 Practice factors associated with high use of dermoscopy

	High dermoscopy users	Low dermoscopy users	P-value	P-value multivariate ^a
N = 6118	3830 (62.60)	2288 (37.40)		
No. of years using dermoscopy ^b				
< 2 years	284 (7.45)	360 (15.80)	< 0.001	< 0.001
2–5 years	710 (18.63)	506 (22.20)		
> 5 years	2818 (73.92)	1413 (62.00)		
Types of dermoscopes used				
Nonpolarized immersion contact	2025 (52.87)	1266 (55.33)	0.328	
Polarized light dermoscope	2223 (58.04)	1050 (45.89)	< 0.001	0.021
Dermoscope with digital camera	961 (25.09)	422 (18.44)	< 0.001	
Digital videodermatoscopy system	1174 (30.65)	424 (18.53)	< 0.001	0.012
Average frequency of using dermoscopy ^b				
Less than once per month	10 (0.26)	37 (1.62)	< 0.001	< 0.001
1–4 times per month	62 (1.62)	185 (8.10)		
More than once per week	244 (6.39)	406 (17.78)		
Daily	3501 (91.72)	1655 (72.49)		
Regularly used dermoscopic algorithm			0.597	
ABCD rule	1018 (26.58)	841 (36.76)	< 0.001	0.001
CASH	22 (0.57)	17 (0.74)	1.000	
Menzies algorithm	107 (2.79)	51 (2.23)	0.825	
Seven-point check list	331 (8.64)	155 (6.77)	0.093	
Pattern analysis	1338 (34.93)	522 (22.81)	< 0.001	< 0.001
I do not systematically use any particular algorithm	1057 (27.60)	721 (31.51)	0.012	

CASH: Colour, Architecture, Symmetry and Homogeneity. ^aVariables without a P-value in this column were not significant in multivariate analysis and were not entered into the model as they did not improve the regression model. ^bVariables with a calculated linear correlation in multivariate analysis.

incentives. This is in sharp contrast with other reports^{4,5,8} and is based on a significantly large sample, suggesting that improving education and access to equipment could enhance the use of dermoscopy by European dermatologists.

The importance of education for enhancing the use of dermoscopy was a main finding of our study, confirming the insights from previous national reports on a pan-European scale.^{4,5,8,10} Half of dermatologists who did not use dermoscopy had not received any training in dermoscopy, and a lack of training and confidence in their own dermoscopy skills were among the main reasons for not using dermoscopy. Access to dermoscopy education was also an important factor associated with high use of dermoscopy compared with low use. Residency dermoscopy training appeared to be particularly important in distinguishing dermoscopy users vs. nonusers and high users vs. low users. As less than 40% of all respondents reported dermoscopy training during residency, this is an area where improvement is needed towards achieving a harmonized, high-standard education of dermatologists across Europe in order to comply with current practice guidelines,^{29–32} where dermoscopy becomes the standard of care.

Practice setting was another noteworthy factor influencing the use of dermoscopy in Europe. Both nonusers and low users of dermoscopy were more likely to work in public healthcare facilities than in other settings. In contrast, dermatologists working in individual practices were the most likely to use dermoscopy. The reasons for these differences require further exploration. The lack of available equipment may play

a role, as this was a common reason given by physicians who did not use dermoscopy and worked in public healthcare facilities. A lack of training or workload, as reasons for not using dermoscopy, did not appear to differ between private or public practice settings ($P = 0.154$). Overall, dermoscopy users reported a much higher number of patients seen per month than nonusers (Table 1), and there was no significant difference between the number of patients seen monthly by high users vs. low users.

Dermoscopy users in general, and high users in particular, saw more patients with skin cancer per month and were most confident in their diagnostic skills for pigmented skin tumours. This suggests that the main use of dermoscopy remains related to the diagnosis of melanoma and skin cancers. At the other end of the spectrum, inflammatory lesions (for which dermoscopy use is still under exploration and standardization)^{27,28} was the category in which dermoscopy was used least often, its benefits were perceived to be lower and the lowest self-confidence was expressed by a considerable proportion of responders.

Many algorithms exist to facilitate the dermoscopic diagnosis of skin lesions, particularly for melanoma.^{38–40} In our study, it was interesting to find that use of the classic ABCD algorithm was reported mostly by low users of dermoscopy (37%), while pattern analysis was favoured by high users (35%). Roughly one-third of respondents in both high-use and low-use categories reported not using any algorithm in particular.

Contact immersion dermoscopy and polarized light dermoscopy appeared to be used with equal frequency by European dermatologists, and about 37% of responders reported using a digital dermoscopy device. As digital photo or video-dermoscopy systems are essential for monitoring melanocytic lesions and monitoring patients with a risk of melanoma,^{17,41–43} these results suggest that a minority of dermatologists who use dermoscopy are equipped for the proper management of skin cancer and high-risk patients.

The demographics of our respondents were comparable with similar surveys, with a majority of female responders, likely reflecting the higher proportion of female physicians in dermatology practice worldwide. The mean age of our responders across Europe was lower than reported in France and the U.K.,^{4,5} and dermoscopy use was not associated with younger age in our study, likely reflecting the heterogeneity in the age distribution and training of dermatologists among European countries.

Our study has several limitations inherent to its design and proportions. The representativeness and possible selection bias are issues common to all similar studies. We chose to report the number of responders relative to the total number of dermatologists officially registered in the participating countries, and not to the number of dermatologists contacted, in order to have a reliable parameter for assessing the penetrance and representativeness of our survey. As the inclusion of dermatologists in different professional associations or contact databases varied significantly among countries, we considered that the official number of dermatologists issued by the health authority is a more informative denominator for our analysis. Using this definition, we reached a median response rate of 33% of all dermatologists in the participating countries. Similar studies on a national scale had a response rate of 22% of British Association of Dermatologists⁴ and 49.6% of all registered private dermatologists in France.⁵ Obtaining more than 8000 surveys reflects not only the interest that European dermatologists have in dermoscopy, but also the strong commitment of the NCTs to reach and motivate the responders, and the effectiveness of the methodology.

It may be argued that a survey of this type is more likely to be answered by dermoscopy users than nonusers or frequent users of dermoscopy rather than sporadic users. Nonetheless, we received surveys from more than 800 nonusers and many more sporadic users. Our analysis takes the pan-European view, as mobility of patients, physicians and trainees, coupled with the common historical and political framework, unites European countries in facing common challenges in medical care. Thus, a common vision and a harmonized strategy are needed. However, there are notable differences in health system organization and training for dermatologists among European and even EU countries, which will require tailored solutions. While it is difficult to make comparisons between individual countries because of the different response rates, a more detailed analysis of our results regarding regional patterns is ongoing and will be reported in the future.

The survey was addressed to dermatologists, as they are the main users of dermoscopy across all European countries. While the extension of dermoscopy training to general practitioners or specialized nurses is considered by some countries,⁴⁴ this practice is still nascent in most parts of the European continent and could be considered for future research.

In conclusion, owing to its large size and pan-European reach, this study allows for an unprecedented view of dermoscopy practice across the continent. Among up to 7500 respondents, dermoscopy appears to be a well-established diagnostic method, widely used and well regarded by European dermatologists. Expanding access to the relatively inexpensive equipment, especially in public healthcare facilities and establishing dermoscopy training as a key part of dermatology residency appear to be the main pathways, which are both feasible and affordable, to enhance the use of this technique across European countries. In light of the rich evidence-based benefits of dermoscopy for the early detection of skin cancers and the noninvasive diagnosis of skin diseases, this in turn might have far-reaching benefits for improving the landscape of dermatological care in Europe.

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Appendix 1

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Supporting Information

Additional Supporting Information may be found in the online version of this article at the publisher's website:

Appendix S1. Eurodermoscopy questionnaire.

Fig S1. Reasons for not using dermoscopy by work setting.

Table S1. Attitudes related to high use of dermoscopy.