EDF POSITION PAPER

FROM EMPIRICISM TO SCIENCE

The dermatology profession has been distinguished by its development from empirical treatment to rational therapies. An evolving understanding of the pathogenesis of skin diseases has enabled this trend to accelerate in recent years.

Dermatology has simultaneously expanded from an organ-specific speciality to one which overlaps with numerous disciplines including oncology, allergology, immunology and others.

The quality of skin care remains our primary concern. However, recent changes in European healthcare delivery systems, budgetary constraints and the increasing influence of third parties on the practice of medicine (government, insurance companies) threaten to limit the further development of our profession.

It is therefore imperative that the dermatology profession identifies possible future scenarios for the practice and development of the speciality in Europe and implements strategies and programmes with optimum cost-benefit ratios for governments and health authorities. In so doing we can ensure a managed evolution of the profession to best serve the needs of patients and society.

A small group of dermatologists has become informally associated and known as the European Dermatology Forum (EDF) in order to provide initiative in addressing these issues.

THE EDF AIMS TO:

Define the necessary competencies of dermatology and dermatovenereology professionals',

Improve the understanding of the structure and function of skin so that dermatology has the right impact on the medical community, governmental fora and society,

Promote the highest possible standard of prevention, diagnosis and treatment of skin diseases,

Develop and maintain content and high quality of dermatological training programmes,

Secure and expand the scientific basis of dermatology through research,

Provide independent advice and facilitate communication between dermatologists and European organisations concerned with improving quality of skin care : industry,
academia, government, society and patient associations.

The following pages describe in more detail why the European Dermatology Forum is necessary and how it intends to achieve these aims.

1- In most European countries the dermatology profession includes competency in venereology. The terms ‚dermatology' and ‚dermatovenereology' are interchangeable in many instances in this paper.

DEFINING THE NECESSARY COMPETENCIES OF DERMATOLOGY AND DERMATOVENEREOLOGY

on dermatological specialities including, for example, paediatrics, clinical immunology and allergology, rheumatology and dental surgery are increasingly encroaching on clinical activities traditionally regarded as the responsibility of the dermatological specialist. This is not a bad thing if the patient is better served by other specialities. However, in many instances, the patient is denied the benefits of the unique training of the dermatologist which combines very detailed understanding of the structure and function of healthy skin, its derangement in diseased states, its interaction with the systems of the body as a whole and the potential for its therapeutic modification and correction. Unlike most other specialists, the dermatologist's training integrates a comprehensive knowledge of clinical features of skin disease with a detailed familiarity with the histo-pathological, immuno-pathological and ultra-structural aspects. The dermatologist is thus ideally placed to provide comprehensive skin care for the skin disease sufferer. On this basis, there is clearly a need for a working definition of the scope of the dermatologist's expertise which should be agreed upon by the European medical profession, and used as a guide in future specialist training.

General: Dermatologists have a thorough grounding in internal medicine, enabling insight into the interactions between the skin and other systems of the body, and a detailed understanding of the structure and function of the skin. The dermatologist will - through personal exposure to research methodology and some familiarity with the concepts of molecular biology, genetics and immunology - be in a position to understand and comment critically on dermatological literature and relevant publications of all types. They will be able to contribute to health education in the dermatological context and to local and national issues of public concern and relevance in the field of the skin and skin diseases. In order to place dermatological clinical practice in the wider context of preventive health and health education issues, the dermatologist will have a basic knowledge of public health and epidemiological sciences and be able to act as an information resource on these matters.

Dermatopathology: Dermatologists have a detailed understanding of the technical and diagnostic aspects of dermatopathology and will be a teaching and information resource to colleagues in general pathology. In particular, because of the dermatologist's wide clinical experience, close correlation between the clinical picture and the histopathological appearances will be routinely achieved, to the benefit of the patient in terms of accuracy of diagnosis and prognosis.

Preventive medicine: Health education advice on subjects such as the prevention of sun-induced skin damage and skin cancer, prevention of the progression of the atopic diathesis including atopic eczema, and prevention of occupational skin disease should clearly be the responsibility of the dermatologist. With a thorough working knowledge of the genetic and molecular basis of genetic skin disorders, the dermatologist is ideally suited to advise on the prenatal diagnosis of genetic skin disorders.
Atopic eczema, urticaria and angioedema as part of the anaphylactic syndrome and drug eruptions constitute major illnesses in dermatology. Allergy diagnosis (including intracutaneous tests, in vitro tests and provocation procedures for food and drug allergies) are an essential part of the skilled dermatologist's activity today.

Photodermatology and phototherapy: Apart from the diagnosis and investigation of photodermatoses, a European dermatologist should also offer expertise on a range of modalities of phototherapy and photochemotherapy for skin disorders. The European dermatologist will be familiar with dosimetry and should be an information resource on the short- and long-term hazards and side effects of non-ionising radiation. Knowledge of the role of prophylactic measures in the prevention of skin cancer and photoageing is also entirely within the remit of the dermatologist.

Genetics and paediatric dermatology: Skin diseases affecting infants and children require the expertise of the dermatologist (although especially in the case of neonates, the provision of care in collaboration with the paediatrician is desirable). The dermatologist should play a pivotal role in the diagnosis, evaluation and management of genetic disorders which predominantly affect the skin, and should counsel the family on prenatal diagnosis. In the future, programmes for gene therapy of genetically determined skin disorders should involve a dermatologist as a key member of the team.

Infestation and infections of the skin: The dermatovenereology specialist has a firm grounding in the biology and epidemiology of important skin pathogens, as well as close familiarity with newer medications against pathogenic fungi, herpes virus, retroviruses including HIV infection and other relevant organisms. Molecular biological techniques for the diagnosis of Borrelia and mycobacterial infections, and expertise in the management of drug resistant bacterial, parasitic and viral strains are also a dermatological responsibility.

Oncology and ionising radiation therapy: Pigmented lesions, cutaneous lymphoma and all other malignant skin lesions are properly diagnosed and treated by the dermatologist, who should also be involved in the genetic and flow cytometric analysis of mononuclear cells and in the selection of therapeutic options including radiotherapy. Local surgical excision and, provided the dermatologist has received special training, micrographic surgery should also fall within the scope of dermatology. In the near future the dermatologist will also be involved in the immuno-therapy of cancer (e.g. cytokines, dendritic cells, genetically engineered cancer vaccines etc.).

Immuno-dermatology: Most auto-immune connective tissue diseases involve the skin as a major target organ. The dermatologist will be familiar with the cutaneous and systemic features of these disorders. Important clues to their diagnosis and prognosis can be obtained from the skin, and the patient will receive better care from an integrated approach in partnership with the rheumatologist, renal physician and other specialists.

Inflammatory and papulosquamous skin diseases: The management of psoriasis, infantile eczema, adult atopic dermatitis and other papulosquamous skin disorders should be the responsibility of the dermatologist, who will be familiar with more advanced forms of treatment including immunotherapy modalities, vitamin D analogues, photo-chemotherapy and a range of new, high potency topical therapies.

Dermatological surgery: European dermatologists trained in the past 10-20 years have all received thorough practical instruction in the cutaneous anatomy from skin to fascia, simple elliptical excision, shave excision, diathermy, choice of suture materials and cosmetic effects of surgical procedures. They are thus well placed to deal with benign and locally malignant skin tumours. Liquid nitrogen cryo-surgery and chemo-surgery for warts and laser therapy for vascular and pigmented naevi are also properly within the remit of the dermatologist.

Contact and occupational dermatitis and allergy: Investigation and patch testing for occupational and non-occupational contact allergic dermatoses is an important component of the role of the dermatologist, and it is not provided for adequately by allergists or other specialities. This work will include medicolegal advice on compensation claims and advice to industry on avoidance of occupational dermatitis problems. Intracutaneous „prick" skin testing for immediate type hypersensitivity is also available for diagnosis of acute IgE mediated skin and mucosal disorders.

Genito urinary medicine: The European dermatovenereologist will be familiar with the epidemiology of sexually transmitted diseases (STD), their clinical manifestations, modes of transmission, sites of infection and their appropriate treatment. Microscopy and culture techniques are readily available as well as interpretation of the full range of serological tests for syphilis. All preventive aspects including contact tracing and partner notification are also offered by dermatovenereologists.

Andrology: Dermatology training includes basic aspects of andrology as well as functional disturbances of the male sexual organs and sterility.
Disorders of hair: Dermatologists are familiar with the anatomy and physiology of hair, its changes with ageing, scalp and pigmentation disorders, excessive hair loss and the treatment of various types of androgenic alopecia.

Wound care: The restoration of the normal barrier function of skin, particularly the healing of chronic wounds rests within the domain of dermatologists. These wounds include ulcers of various origins including venous, arterial and combined types, as well as conditions such as pyoderma gangrenosum.

Cosmetic dermatology: Of all specialists, the dermatologist is the logical choice for advice and application of a range of retinoid treatments for ageing and photoageing, laser therapy for minor blemishes, peeling procedures and topical modalities for pigmentary abnormalities.

Phlebology and angiology: The strengths and limitations of laser doppler imaging, and other new diagnostic methodologies are familiar to dermatologists. They can offer anti-thrombotic therapy, retrograde venous perfusion technology and vasodilator therapy for vasospastic disorders. Considerable expertise is available to promote healing of indolent leg ulcers. Once again their specialist training in dermatology makes them the relevant first choice in treatments of this kind.

Oral Medicine: Many skin diseases also affect the oral mucosal surfaces and the dermatologist is uniquely qualified to integrate the oral and cutaneous clinical findings, carry out mucosal biopsies, interpret the histopathological findings and offer treatments.

In summary, it is clear that for optimum patient care, the competencies required of dermatologists and dermatovenereologist- encompass a very wide range of medical! disciplines.

As highlighted above, some of these condition-require treatment in concert with other specialists while others come solely under the remit of the dermatologist. It is imperative that both the dermatology profession and other specialists prioritise patient care above other considerations and make their judgement according to the best repository for treatment expertise.

All future development activities of the profession, whether this is the training of dermatologists, the provision of dermatology advice to third parties or the application of research should bear in mind this definition of the competencies of dermatologists and dermatovenereologists.

IMPROVING THE UNDERSTANDING OF THE STRUCTURE AND FUNCTION OF SKIN

Optimal patient care requires a thorough understanding of the structure and function of the skin by all physicians. Decisions about patient management must be made by clinicians who understand the particular competencies of dermatologists and their integration into a multidisciplinary approach to multi-organ disease.

It is important to understand that the skin is not only one of the largest organs of the human body, but an organ with a remarkable multitude of functions. The skin should not be viewed simply as a physical restraint which holds the whole organism together, but rather as an active organ with secretory, metabolic, and immunological capacities.
Functions of the skin include:
- Barrier to the environment,
- Sensory organ,
- Metabolic and hormonal processes,
- Immunological reactions,
- Aesthetic functions,
- Psycho-social indications which underpin other diagnoses,
- Thermoregulation.

Unlike any other organ, the skin is in continuous and intense interaction with environmental influences. These can take the form of substances or forces of physical, chemical and biological origin via different routes, including the results of psycho-social interaction. All these influences can lead to changes in skin function and, under certain conditions, disease. Changes in the skin often are a primary source of diagnosis of illnesses involving other organs and an understanding thereof is vital.
Many toxic environmental factors exert changes in the skin long before systemic or life-threatening diseases appear. The skin can also be regarded as a „signal organ“ for noxious environmental influences.

It is also the first visible organ and a very sensitive indicator of potentially serious disease in other organs. This can be seen in very acute situations (paleness in shock) as well as chronic conditions.

Often skin disease on its own is not directly „life threatening“ and therefore might be regarded as a minor problem. However, human suffering and the required clinical treatment is much more complex than calculating mortality rates. Human suffering might be simply subjective feelings (pain or pruritus) from disability or disfigurement. Clearly, this suffering nevertheless needs treatment and careful consideration of the possibility of more serious diagnoses.

In addition to understanding the importance of the skin as a primary indicator of disease in other organs, we should take into account the considerable impact of skin disease on society for the following reasons:
Malignancy - malignant diseases such as melanoma are increasingly prevalent the world over and are among the leading causes of death in many countries.
Disability - healthy skin is a prerequisite for many vital functions (e.g. motion). Disturbances can lead to disability - contact dermatitis is for example one of the most frequent occupational diseases in many countries. The socio-economic impact of skin disease can be seen in the form of lost working hours - recent estimates of the annual cost to the US put this as high as 1.5 billion US$.

Discomfort/Impaired quality of life - due to their acuteness or chronicity and relapsing nature, many skin diseases engender tremendous discomfort for the patient. Pain is generally accepted as a miserable condition in need of treatment, whereas pruritus, often a feature of skin disease, is often not taken seriously by those who have not experienced chronic itch themselves. Severe intractable pruritus is a major problem which significantly reduces quality of life.

• Disfigurement - changes in the skin surface can give rise to serious psycho-social disturbances, let us take for example the effect of hypopigmentation in pigmented people. We must not underestimate Fitzpatrick's maxim that the skin can be regarded as our „passport to society".

It is for these reasons that an understanding of the skin and its functions in health and disease should be part of the common knowledge of all physicians. However the more sophisticated knowledge regarding over two thousand different skin diseases and skin reactions to environmental stimuli is uniquely the domain of trained dermatologists. We should look to our universities and medical schools for the proper training of physicians with regard to understanding the skin in health and disease.

STRENGTHENING THE IMPACT OF DERMATOLOGY IN THE MEDICAL COMMUNITY, GOVERNMENTAL FORA & SOCIETY

To achieve this goal, certain basic activities will be necessary:

(1) First, research is needed to understand the current status, as well as the future expectations, of the dermatology profession by these audiences.

(2) Critical analysis of the results will help us to design and implement programmes to address gaps in service, attitudes towards dermatology and insure appropriate preparation for the future.
It is of a great importance that critical analysis becomes an ongoing activity within the profession so that a process of continual action for improvement is set in place.

Improving the acceptance of dermatology by the medical community
We will examine below three distinct medical communities:
(i) Scientific medical community
(ii) Hospital dermatology,
(iii) Dermatology in private practice.

(i) Scientific medical community
When examining dermatology's current position in the scientific medical community, it is clear that the tremendous success of dermatological research has raised the general profile of dermatology. Today, the majority of dermatological research groups receive grant money and their scientific results are widely published in the most well respected scientific journals. In addition, many such research groups are recognised partners in scientific co-operation with other research labs and industry research institutes.

The following activities could further improve the understanding and the impact of the profession:

Joint research projects and exchange programmes between dermatology researchers and basic science research laboratories,

Integrating biologists, biochemists, human geneticists and molecular biologists into dermatology research groups,

Intensification of collaborative efforts with pharmaceutical and cosmeceutic company research institutes,

Public presentation and discussion of the implications of dermatological research for other diseases.

(ii) Hospital dermatology
The situation of the profession in the hospital dermatology setting in Europe is highly heterogeneous. In German-speaking countries, dermatology covers a wide range of activities including conservative dermatology, dermatological surgery, dermatological oncology, cutaneous histopathology, diagnosis and treatment of allergic diseases, sexually transmitted diseases (STD), proctology, phlebology and dermatological angiology and andrology.

In other parts of Europe, the dermatology spectrum is much more narrow.
A wide spectrum of hospital dermatology competencies has advantages for dermatology in private practice. A narrow spectrum

might lead to other disciplines taking responsibility for the treatment of many skin diseases, for example, malignant melanomas being treated by surgeons and/or oncologists. As a consequence, dermatology in private practice would also change, and would become a merely cosmetic and advisory activity. Therefore, the acceptance of a broad competency of dermatology within hospital medicine is crucial.

We must therefore address critical issues such as the following:
Strengthen our skills in rapidly evolving aspects of hospital-based medicine such as dermatological surgery, oncology and genetic therapy,

Ensure that only our best dermatologists are seconded to other hospital disciplines when these are required,

Document the expertise of dermatology as a partner discipline to representatives of disciplines with overlapping interests,

Write articles on dermatology for continuous education publications read by other disciplines,

Convince hospital administrations to treat the budgetary needs of dermatology in the same manner as those of other disciplines,

Ensure that new drugs and devices are requested irrespective of cost when these are necessary and that hospital administrations do not prioritise other disciplines over dermatology due to a lack of appreciation of skin disease's impact on the public,

Increase patient satisfaction and acceptance of treatment in the clinic setting,

Train hospital-based dermatologists to serve as vocal advocates for their profession towards general practitioners. This will, in turn, generate a demand for their expertise.

(iii) Dermatology in private practice
Dermatology in private practice requires addressing a broader, more patient-oriented, set of issues. Patient satisfaction with private dermatological practice - by ensuring best quality care, access to doctors and understanding of treatment - must be a primary objective.

Other issues to be addressed include the following:

Ensure that private practice dermatologists have an active participation in campaigns to make patients aware of existence of free advice clinics (melanoma clinics, free mole inspection etc.),

Participate in continuous training pro-grammes for general practitioners,

Co-ordinate with different physicians' activities, ensuring the presence of a dermatology representative. This will require:
* the organisation of local dermatologists groups (this is common with other medical specialities),
* support and solidarity for other specialised disciplines with similar problems.

Ensure the best possible service to the referring GPs by providing the highest quality and timeliest reports and feedback on treatment (for instance by electronic means if this is available),

Close co-operation with the hospital dermatology departments so that problem cases can be successfully resolved,

Participate in public education programmes.

Improving the acceptance of dermatology in governmental fora

In Europe, governmental agencies will continue to play a central role in healthcare policy-setting, regulation and cost management. Many new healthcare policies critical to the vitality of the dermatology profession will be developed and implemented during the next 5-10 years and there will be an increasing influence of Pan-European policies at the national level.

In this changing environment, dermatologists must actively represent their profession's interests and, in this context, the following points need to be addressed:

Develop the profession's European perspective,

Train leading dermatologists in communication and lobbying skills,

Identify key government decision makers with a responsibility for dermatology and ensure constant communication and collaboration with them,

Bring qualified dermatologists into decision-making positions and advisory functions.

Improving the acceptance of dermatology in society

Our knowledge base concerning the perception of dermatology and its services by society is weak and rapidly rendered obsolete by changes in the healthcare environment, particularly insurance and reimbursement policy. Regular customer research with patients should be established to help the profession assess future patient needs and opportunities for responding to these needs.

We believe that communication programmes with the general public should make maximum use of data on the effect of skin disease on quality of life and the cost-advantages of maintaining healthy skin. This communication must be bi-directional.

Topics for evaluation include:
Campaigns to raise awareness of increasingly common conditions such as skin cancer: it is the most frequent cancer in man, and dermatologists are the only medical subgroup who can reliably diagnose skin cancer at early curable stages,

Raising the awareness of the dermatologist's role in promoting healthy skin and stress that dermatologists help people maintain healthy skin, not just treat diseased skin,

Cooperating with patient associations,

Developing leading dermatologists as public advocates for good skin health.

COMMUNICATING AND COLLABORATING WITH PATIENT ASSOCIATIONS

Here is a growing public expectation that patients and their families should participate more fully in medical decisions and health care. Both physicians and patients will benefit from an improved interchange and from physicians devoting time to teaching patients. This will not only improve patient care, but can only contribute to the greater understanding of skin disease and dermatologists' skills in the wider community.

Better explanations to both patients and their families can be facilitated by greater use of audio-visual and written instructions, pamphlets, guidelines and reviews. In addition, the exchange of these tools between countries will improve their quality, ensure that they benefit from local research and are kept up to date.

It is also important for patients to have contact with others suffering from the same disease, so they can discuss the handling of specific problems and the management of contact with others. Doctors can play an important role in facilitating this communication, both in a teaching capacity as described above and as a support to patients.

We propose that a master list of these associations in Europe be compiled, so that these can interact over national borders. It is important when compiling this list not to forget the evolving impact of the Internet on patient to patient communication. The Internet is also becoming a source of information on treatments and services available from dermatology practices and clinics and from pharmaceutical and cosmeceutic companies, as well as a tool for companies and researchers looking for patients for clinical trials.

Patient associations are often active as influence groups on politicians and decisions makers. In working with these patient groups, dermatologists can aim at providing the best possible patient care as well as a better understanding of skin disease and dermatology by the widest possible group of communities.

Finally, the role of the patient as a consumer of dermatological services and products must be taken into account and feed-back mechanisms established to ensure bi-directional communication.

DEVELOPING AND MAINTAINING THE HIGHEST QUALITY DERMATOLOGICAL TRAINING

There are further differences with respect to dermatology between Southern and East European Dermatology when compared to the former Western European countries.

(i) The heterogeneity of dermatology training in Europe
In most European countries, the minimum criteria for the quality of training in dermatology has been defined. However, a considerable heterogeneity exists.

In some countries the duration of training is restricted to four years, in others it is five. In certain countries, a final examination must be passed before the degree of medical specialist is attained. In other countries, training at a qualified institution in itself is sufficient to

(ii) „Minimum criteria" for training in Dermatology-Venereology.
The Union of European Medical Specialists (UEMS) specialist section Dermatology-Venereology, has prepared a charter on the training of medical specialists in the European Union with respect to requirements for the speciality Dermatology-Venereology. The

charter describes the requirements of the institution and a general programme for trainees.

This programme states that trainees should acquire an understanding of and practical experience in various fields of the specialism. However, the option of certification of courses of excellence in various subspecialties is not proposed. In contrast, the guidelines of the UEMS aim for broad training in dermatology during a „minimum period of 4 years" and „sufficient clinical experience".

Future development
In order that dermatologists in Europe are major players in healthcare, the training of dermatologists must be ambitious.

On the one hand, „minimum criteria" are important in order to certify sufficient dermatological expertise. It is equally important that these minimum criteria be uniform across Europe, thus allowing European mobility of dermatologists.

However, minimum criteria are not sufficient on their own. It should be our ambition to provide courses for dermatologists which result in certification of a certain level of excellence, and that different courses are offered in various fields of dermatology. Such courses must be taught by well recognised opinion leaders in the subspecialities.

We propose that these courses come under the auspices of the EDF and lead to an EDF diploma certifying excellence in the subspeciality.

Relationship with other specialities
We have documented the importance of a knowledge of dermatology for nearly all specialities. It is therefore of major importance that medical students are given sufficient grounding in dermatology whether or not they intend to go on to specialise in this field. Greater knowledge of dermatology will ensure better patient care by general practitioners and more adequate referrals to dermatologists. Clearly it is also important to establish postgraduate teaching of other disciplines.

In certain European countries, GPs with a special interest in dermatology are regarded as first line „specialists" to whom the more common dermatological conditions are referred. It is our view that there can be no compromise on expertise. With the availability of advice from fully qualified specialists, there is no position for what one might call a „ semi-dermatologist". This can only have a negative effect on patient care.

Once we have addressed the issue of heterogeneity in Europe and established training programmes with uniform criteria and a scale of certification, we can then address the ongoing development of dermatological training to ensure continued excellence in the discipline with the ultimate aim of optimum patient treatment.

SECURING AND EXPANDING THE SCIENTIFIC.13ASIS OF DERMATOLOGY THROUGH RESEARCH

A) Fundamental research fields:
* The immune system: with particular reference to cell trafficking, cell differentiation and differentiation of the del epidermis,
* The pigmentary system: with focus on molecular control,
* Vascular functioning: notably the functional parameters of microvascularisation, angioneo genesis and extravasion of leukocytes,
* The connective tissue: specifically the differentiation of fibroblasts and tissue formation.

B) Clinical research domains:
of new selective treatments based on our insight into the pathogenesis of skin disorders,
* The assessment of new treatments using quality of life as an important criterium.
* A comprehensive insight epidemiology of skin disorders.
* Epidermal growth and differentiation; specifically the molecular controls of these processes,
* Inflammation: particularly the signalling pathways,
* High quality fundamental and chin

will provide the rationale for further development of clinical dermatology, future.

CONCLUSION

The first step toward securing the development of the dermatology profession in Europe must be taken by dermatologists who are willing to invest their time, energy and visions in a process of discussions, debate and decision-making.

The issues facing our profession are manifold and evolving rapidly - in pace with the changes in our economic, political, medical and social environment.

The European Dermatology Forum members believe that new Pan-European leadership is required in order to mobilise the resources and talents of the dermatology community and their medical and commercial partners.
With the elaboration of this position paper, we hope to have established a sound point of departure.
The voice of the patient remains our guidepost, the development of our profession, our duty.

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