# **CHAPTER 1** Introduction

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International tourism is one of the largest and fastest growing economic sectors in the world with continuous expansion and diversification, and many new destinations, often to less privileged areas.

International tourist visits in 2010 were estimated to be 940 million, and are expected to increase by 4–5% in 2011. In 2020, 1.6 billion international visits are expected. Expenditure on international tourism had reached \$919bn (€693bn) in 2010. International tourism is the fourth global export category and accounts for 30% of world exports of commercial services. It is estimated to contribute 5% to the worldwide gross domestic product [1].

As the world develops into a global village, people travel daily from continent to continent and infectious diseases may travel with them. On the one hand, someone with an infection acquired under "tropical" conditions abroad may visit the health services in Europe or North America within 24 hours of his or her departure from the country visited. On the other hand, in some diseases, clinical signs and symptoms may develop weeks to months after return, so the relationship with the past travel is not obvious.

There are three main reasons why patients with "tropical or exotic skin diseases" have been seen more frequently in recent years.

First, leisure time in affluent societies is increasing, and more and more people, including those in the older age groups, take holidays in far-off places. More and more adventure holidays are being taken to places where the risk of acquiring a disease is much greater than in a more protected environment.

Second, there are large immigrant groups in most Western countries, originating from other continents. They may present with skin diseases months or years after settling into their new home country. Also, these

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Imported Skin Diseases, Second Edition. Edited by William R. Faber,

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people may regularly visit their family in their country of origin and acquire a skin disease.

Third, there is a group of professional travelers visiting, regularly or for a long periods, countries in other continents; this includes members of the military going for training or peace-keeping missions.

Skin diseases are found in a considerable number of travelers. It was reported that among 2004 patients attending an Institute for Tropical Medicine in Berlin, Germany, 14% of the consultations were for skin diseases [2]. From the United States of America, a 2-year survey of 784 travelers to developing countries reported skin problems during travel in 8% of the travelers. In 3% of them these problems continued or had an onset within 14 days after return [3]. Of 12,437 travelers to Nepal, 12.44% were found to have skin diseases in which bacterial skin diseases, fungal skin diseases, scabies, and "skin allergy" were the most prevalent [4]. More recently, in a study from 30 GeoSentinel sites, which are specialized travel or tropical medicine clinics, of travelers returning from six developing regions of the world, it was found that dermatological disorders ranked third in frequency [5].

French researchers reported in a prospective study of French travelers to tropical countries, of whom 38% had visited sub-Saharan Africa, that the most common diagnoses in 269 patients were cutaneous larva migrans (25%) and pyoderma (18%), followed by insect bites, myiasis, tungiasis, urticaria, fever and rash, and cutaneous leishmaniasis in 10% or less. In 39% of the patients the skin lesions developed after the return to France. The median onset after departure from the tropics was 7 days (range 0–52 days) [6]. The most common skin-related diagnoses in 4595 patients seen in GeoSentinel clinics were cutaneous larva migrans (9.8%), insect bites (8.2%), skin abscess (7.7%), and superinfected insect bites (6.8%) [7].

This book has been written and illustrated for the health professionals living in western Europe and North America in order to help in the diagnosis and management of patients with diseases acquired in another, often tropical, environment. In this respect, the book deals with skin diseases that are not common in the Western world.

A wide spectrum of imported skin diseases, the majority infectious in origin, is covered. Sexually transmitted infections as well as dermatological diseases are also discussed.

Skin signs may provide a clue to the diagnosis of sometimes lifethreatening systemic infections, and should therefore be recognized as soon as possible by the attending physician. As travel these days is often not only terrestrial but also involves water exposure in the ocean or rivers, a chapter on aquatic skin disorders is included.

The book also deals with emerging diseases such as cutaneous leishmaniasis, which is being diagnosed with increasing frequency in

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travelers and also in the military sector, and Buruli ulcer, which is still rare in travelers.

The influence of environmental factors, the characteristics of pigmented skin, which influence the clinical expression of diseases in the colored skin, and disorders of the pigmentary system itself are also addressed. Tables and flow charts of important clinical conditions and the relationship of those skin diseases to the different geographical areas will be helpful in the diagnosis and management of patients with imported skin diseases.

The contributions of the authors, all experts in their respective fields, are greatly appreciated.

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