

Poverty, health and development in dermatology

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Abstract

The WHO Constitution states that “The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being without distinction of race, religion, political, economic or social condition.”

The right to health means that governments must generate conditions in which everyone can be as healthy as possible. Such conditions range from ensuring availability of health services, healthy and safe working conditions, adequate housing and nutritious food.

In this report the author analyzes the relationship among health, dermatology and development and tries to find out what the scientific world, including dermatologists, could do for the improvement of health systems.

The foreigners
“The foreigners go to Africa to kill wild animals;
They go to Africa to forget their sorrows;
They go to Africa as one goes to the market;
They go to Africa, but they prefer to live in Europe;
They go to Africa, but they never reach Africa”.
Ndjock Ngana Yogo Ndjock

Introduction: A Matter of Urgency

On a world scale, there are at present three basic issues urging for a global ethic system: the social crisis, the working system crisis, and the environmental crisis.

Global problems and global solutions

The change in the technology, which was made possible by means of robots and computers, has fostered an incredible production of wealth, to the advantage of the great transnational corporations and to the detriment of the poor. So the gap between these conditions is more and more large.

In the leading countries, a kind of humanity is emerging who lives in the affluence, and controls the scientific, technical, economical, and political processes; in parallel, in some oases of the peripheral countries, only some social classes are allowed to share a privileged situation. By exploiting the technical-scientific progress, biogenetics, and manipulation of the natural resources, this part of mankind lives in their protected “sanctuaries” for about 120/130 years, our cells’ biological time.

On the other hand, we find the old style humanity living in the effort to maintain reasonable consumption standards, or even in poverty, marginalization, and exclusion, as for ages mankind has lived, and only aiming for a maximum life expectancy of 60/70 years.¹

Second, there is the crisis of the working system. The new technological progress, communications, automation, and robotization are no longer based on subordinate work, and indeed, less and less is human labor employed as machines replace it. So a great number of job positions are destroyed, numberless workers are made redundant, and an immense host of excluded is created.

Third, a great danger of ecologic imbalance is threatening our existence and may prospectively jeopardize the function of the Earth as a system integrator of systems.

In order to preserve, a change must be done.

Poverty and Health

All countries of the world have pledged to reach the Millennium Development Goals (MDGs) set at the United Nations Summit in 2000. These include ambitious targets for nutrition, maternal and child health, infectious disease control, and access to essential medicines. Three of the eight goals are directly health related; all of the others have important indirect effects on health. Twenty-nine years ago, the Declaration of Alma-Ata challenged the world to embrace the principles of primary health care as the way to overcome gross health

inequalities between and within countries. “Health for all” became the slogan for a movement. It was not just an ideal but an organizing principle: everybody needs and is entitled to the highest possible standard of health. The principles defined at that time remain indispensable for a coherent vision of global health. This entails working with countries not only to confront health crises but also to construct sustainable and equitable health systems. Urgent or essential hospital treatment is provided free of charge to illegal migrants who do not have the means to pay for it, together with care in relation to pregnancy and for minors, vaccinations, diagnosis, and treatment of infectious diseases.²

The WHO document *Health Systems Confront the Poverty*³ acknowledges that poverty is multidimensional and is linked not only to material deprivation but also to low educational achievement, poor health, vulnerability, and exposure to environmental and occupational risks, as well as voicelessness and powerlessness. Furthermore, it recognizes that poverty deprives individuals of the freedom to satisfy basic needs and rights. This might include freedom to achieve sufficient nutrition (food security), to obtain remedies for treatable illnesses, or to enjoy clean water or sanitary facilities. This lack of freedom prevents individuals from fulfilling their potentialities, thus leading to a great loss for society and hampering development. Poverty might also be the source of stigmatization within subgroups of our societies, within national borders, and among countries – both rich and poor. Finally, the WHO publication confirms that the impact of poverty might be unequally distributed among the poor and that it can have different impact according, for example, to gender and age group.⁴

Relative poverty (where people’s economic resources do not allow them a minimum acceptable way of life in the society where they live, for example, income below 60% of the median) is also a serious problem in a number of many countries. In 18 countries of central and eastern Europe/newly independent states (CCEE/NIS) in the mid-1990s, more than 165 million people were living on less than US\$4 per day: in eight countries, the proportion of people living on these limited resources was 50% or higher.

The impact of poverty is not equally distributed among the poor. There is evidence that poverty can have different impacts according to gender and age group. It has been shown that women make up 70% of the world population living in absolute poverty.

However, estimating the number of poor men and women independently is difficult because consumption data are collected at household level. Even so, available health and education data indicate that women are often disadvantaged.

The absolute or relative causes are many and various: unemployment as a cause of poverty and ill health is a major pan-European issue. Not only in Africa but also in central and eastern Europe, the scale of this problem reached an alarming

high level in the past decade, with a very severe impact on the health of the population. By the mid-1990s, using the International Labour Organization definition, unemployment was estimated at well over 20% in Kyrgyzstan, and 30% in Tajikistan and the former Yugoslav Republic of Macedonia. Though the magnitude and the context differ, unemployment has also been a significant problem in western Europe in recent decades.

An analysis of the unemployment situation in the European Union (EU) shows a sharp increase from 3% in the early 1970s to approximately 11% by mid-1990, with an overall EU average of 8.6% by April 2001. Given these trends, millions of European people are, or have been, affected by unemployment and its impacts in terms of ill health and poverty.

Youth unemployment is often associated with social and health problems such as violence, suicide, alcohol and drug abuse, and crime.

The association between poverty and urban areas is also particularly important in Europe. Over half the global population and over two-thirds of the European population live in cities. As the world becomes increasingly urban, there are also increases in the number of urban poor and in the divisions between and within cities, and among social groups. Already between one-quarter and one-third of all urban households in the world live in absolute poverty. In terms of disease burden, the urban poor suffer a “double jeopardy” – the so-called “urban penalty”. The urban poor are more exposed to disease because of their poor housing conditions, lack of sanitation, poor diet, and occupational hazards, but they have fewer resources for dealing with illness because they are often marginalized and lack the social networks of the rural poor. However, ill health in turn can create and perpetuate poverty, triggering a vicious circle that hampers economic and social development.

In many urban areas, homelessness has become a very significant problem, although to date there has been no systematic cross-national survey on the issue of homelessness, thus making it impossible to compare the situation in the 51 Member States in the European Region. Recent studies have shown that homeless people have higher overall mortality and morbidity rates than the housed population and, in particular, higher prevalence of chronic chest and other respiratory problems, tuberculosis, fits or loss of consciousness, and alcohol and drug dependence.

Health Expenditure

In 1990, the Commission on Health Research for Development estimated that less than 10% of the global health research resources (totaling US\$30 billion/year in 1986) were being applied to the health problems of developing countries (DC), which accounted for over 90% of the world’s health problems, an imbalance subsequently nominated with the term the “10/90 gap”.⁵

The commission's report, *Health Research: Essential Link to Equity in Development*, detected that health research was significantly directed towards diseases that affected the developed world. The commission estimated that only 5% of global spending on health research in 1986 was allocated for health problems in DC, where 93% of the world's burden of "preventable mortality" occurred.

Later in the 1990s, while the size of the imbalance had become increasingly more complex and difficult to measure quantitatively, the term "10/90 gap" began to be used as a pathognomonic reference to the issue. It has come to symbolize the gross mismatch between needs and investments in health research for development.

In 1996, the WHO Ad Hoc Committee on Health Research Relating to Future Intervention Options estimated that US\$55.8 billion was expended globally on health research in 1992 and underlined that the "10/90 gap" persisted. The world now spends considerably more on health research: the latest estimate puts the figure at US\$105.9 billion for 2001, of which 44% by the public sector, 48% by the private for-profit sector, and 8% by the private not-for-profit sector.⁶

In 2001, the Commission on Macroeconomics and Health, recognizing the high rates of return on investments in health for both the individuals and the countries concerned, recommended a massive increase in these investments in the coming years. From an estimated level of US\$53.5 billion in 2001, the Commission recommends a more than doubling of investments in health in the least-developed and other low-income countries over the 14-year period to 2015, to reach US\$119 billion in 2015. This increase of US\$65.5 billion would be financed by an increase in country-level commitments of US\$40 billion and an increase in donor assistance of US\$25.5 billion (from an estimated US\$3.5 billion in 2001 to US\$29 billion in 2015).⁶ The World Health Organization's Commission on Macroeconomics and Health and several other global initiatives asked a larger investment in health.

The demand should be to reduce inequalities in health investment between and within countries: a 100-fold difference between the rich and the poor in money spent on health services still persists in many places. There is therefore a paradox.

Clinical and public health interventions depend on the capacity of a given country's health system to deliver scarce resources, considering that some interventions are more complex than others in terms of infrastructure and human resources, and the evidence-based approaches must be the foundation for allocating scarce resources. Therefore, both the costs and the likelihood of success of the more complex interventions are a function of the health capacity in place.

In addition, decisions about which interventions should be given priority will depend on assessments of the local burden of disease, local health infrastructure, and other social factors as well as on cost-effectiveness analyses.

The Benefit of Good Health

Health has a major impact on the economic situation and well-being of *an individual in any society*. This is particularly true in the lower income countries (where social safety nets are weak or non-existent) and for the absolute poor, due to the vicious circle of poverty and ill health.

Conversely, improvements in health will boost the individual's level of income (due to lower treatment costs, higher revenue, a longer term increase in revenue due to better work opportunities, and overall growth in revenues due to longer life expectancy); increase the individual's capacity to acquire an education; increase the family's productive opportunities; and greatly improve the psychological well-being of both the individual and the family.

The benefits of good health will be even greater for the absolute poor, as they may transform the vicious circle of poverty into a virtuous circle, with better nutrition, lower risks of unemployment or underemployment, better housing, better use of training opportunities, higher productivity, and, overall, better control over their life situation and that of their family.

Improvements in health are partly due to an increase in the standard of living of a society. Similarly, improvements in health are due to the impressive increase in the average level of education, which has led to better understanding by families of the importance of nutrition, hygiene, and sanitation. As a result, public officials have tended to rely on the development process to bring health to the people and to consider health as a consequence of the development process rather than one of its engines. In this sense, health has traditionally mostly been valued for its social welfare and distributive role, and considered by officials and citizens alike more as a consumption item than an investment.

The epidemiological and demographic profiles of many low- and middle-income countries (LMICs) and the range of available health interventions have changed significantly.

With the year 2006, begins the 10-year countdown to the 2015 deadline for achieving the MDGs. As it is pointed out in the UN Millennium Project, more than 500 million people will be lifted out of extreme poverty if the MDGs are achieved during the next decade. More than 300 million will no longer suffer from hunger.¹ The lives of 30 million children and 2 million mothers can be spared. The spread of AIDS can be reversed. There is more: 350 million fewer people are without safe drinking water and 650 million fewer people live without the benefits of basic sanitation; hundreds of millions more women and girls will go to school, access economic and political opportunity, and have greater security and safety.

In the course of the 20th century, we saw a number of changes in the ways in which countries interrelate, in the demands and pressures on people to move between zones, and in the patterns

of health associated with those new spatial and social interactions. All these changes have both positive and negative features and opportunities for the countries and individuals involved.⁷

The 20th century can be remembered for witnessing the largest universal increase in life expectancy worldwide. While life expectancy is highest in the richest countries, the upward trend is apparent in almost every society.

The 20th century differed markedly from previous history in two focal points:

- First, the rapid economic growth that had begun in the 19th century in countries of the north of the world diffused widely around the globe while continuing in the countries where it originated. It is undoubted that the improved health has contributed significantly to economic welfare.

Per capita gross national product (GNP) rose rapidly in DC in the decades following 1960, and economic research suggests that health improvements led to perhaps 10–15% of that GNP growth. Although GNP includes the costs of providing medical care and reflects changes in health-related consumption, such as the quantity and quality of food, it omits altogether the value that mortality reduction represents for countries. Recent economic research has extended measurement to a broader indicator, known as *full income*, that reflects reasonable valuation of changes in mortality. For many countries, recent mortality changes exceed in value the growth of GNP. More widespread use of full income measures to calculate the rate of return to investments in health and in health research will almost certainly conclude that, today, most countries substantially undervalue those investments.

- Second, the human mortality rates decreased, and all other dimensions of health improved dramatically. These changes remained modest until the 20th century, during which the rate of improvement increased and spread to most of the rest of the world. Moreover, in the past 50 years, variations in this health indicator across and within countries have decreased. Average life expectancy in LMICs increased dramatically in the past half-century, while cross-country health inequalities decreased, even in the presence of widening income gaps in many regions. In the countries with the best health indicators, life expectancy increased a substantial 2.5 years per decade since 1960; LMICs, on average, with life expectancy gains of about 5 years per decade, have been converging toward the countries with the longest life expectancy.

The Alma-Ata Declaration of 1978 was a turning point. The challenge of scaling up services to meet the health-related MDGs and concerns that the multiple international efforts may overwhelm countries' fragile infrastructures have encouraged efforts to think systematically about health system constraints on achieving the MDGs, and the extent to which additional funding can readily and quickly improve services. Weaknesses in service delivery may stem from problems at that level, such as staff shortages, or may be affected by factors higher up the system, such as a poor drug distribution system.

The Phenomenon of Immigration in the North–South Context of the Planet

Throughout history, people have had to abandon their homes and seek safety elsewhere to escape persecution, armed conflict, poverty, and political violence.

Growing poverty is pushing people to move in search of work. Images of a better life in other parts of the world are being heralded through mass media that now reach the most remote areas and communities. The widening disparities in wealth between North and South and the growing need for young and relatively cheap labor in the North suggest that this migration trend will continue. The economic, demographic, technological, and labor changes taking place in many Northern countries require people to be able to move in much the same way as materials and goods are moved – freely and at short notice.⁸

The reality of immigration, which has mixed up human demography completely, has only recently begun to affect EU.

Migrating characteristically involves traveling toward lands that are thought to be prosperous and hospitable. The journey always involves the risk of danger and illness. The word itself has semantic ties to disease. In Greek, the noun *ἀδελαιμία* and the verb *ἀδελαιμῶναι* originally meant a journey, arriving in order to reside in a foreign country. Migration has always been part of human history, from the origin of mankind to the present. Mobility is the salt of progress.

Anthropologists used to think that ideas traveled, while people remained stationary. Today we understand that ideas walk on human legs. Between 60,000 and 70,000 years ago, *Homo sapiens* was already technically competent, able to adapt to a variety of environments. As the population grew and arrived at the point of density saturation, the desire to emigrate and look for empty spaces arose.

At the start of a new millennium, migration – the movement of people from one area to another for varying periods of time – has become more pronounced than ever before. Growing political instability coupled with the fact that economic growth is stagnating in a considerable number of countries means that uprooting and displacement – be it for political, environmental, or economic reasons – will probably continue and become an even greater public health challenge. The debate on health in the context of globalization to date has concentrated on the movement of goods and trade with some attention to people insofar as they provide services. Relatively little attention has been paid by the international community to the most vulnerable population groups in the context of migration.⁹ Yet the magnitude of migration, both forced and voluntary, regular and irregular, suggests that unless attention is paid to these groups, there is a risk that in many settings, individuals and groups will remain socially excluded and unable to benefit from the health care that is due to them as human beings and is required to maintain public

health and social cohesion in an increasingly mobile world. We recognize that health issues for migrant populations represent a serious and important public health and human rights concern.

The migration, like all major social phenomena, brings with it problems as well as benefits; it is important to discuss immigration as a resource for the people involved. Immigration is a phenomenon that concerns the whole of society, though not all parts of society yet see it in this way.

Accepting immigration also means accepting the country's history. Since the past and present are closely linked in a country's history, immigration needs to be accepted as a permanent feature of the world society which therefore requires investment in policies of integration.

Despite the health reforms of recent decades, inadequate progress has been made building a health system that promotes collective health improvement. Extending health-enabling conditions and quality care to all is the major imperative for health systems.

Tropical Skin Diseases

In assigning health priorities, skin diseases are sometimes thought of, in planning terms, as small-time players in the global league of illnesses compared with diseases that cause significant mortality, such as HIV/AIDS, community-acquired pneumonias, and tuberculosis. However, skin problems are generally among the most common diseases seen in primary care setting in tropical areas, and in some regions where transmissible diseases such as tinea imbricate or onchocerciasis are endemic, they become the dominant presentation.

For instance, the WHO's 2001 report (WHO 2005) on the global burden of disease indicated that skin diseases were associated with mortality rates of 20,000 in Sub-Saharan Africa in 2001. This burden was comparable to mortality rates attributed to meningitis, hepatitis B, obstructed labor, and rheumatic heart disease in the same region. Moreover, skin diseases related to HIV, which may constitute an important component of the skin disease burden in DC, particularly in Sub-Saharan Africa, lead to an important impact on life quality.

Skin conditions are amongst the commonest causes of morbidity in rural and urban areas of DC, accounting for a high proportion of visits to primary health care centers, which are often underserved and underfunded.

The limited time and financial resources available in primary health care are frequently swamped by this high patient burden to the detriment of other important health-promoting activities, such as immunization programs or antenatal care. This situation presents a further dilemma in that skills in the management of skin disease are poorly developed, and inappropriate treatment leads to the wastage of household resource which could be spent to the benefit of the family and the community.

Most information about the epidemiology of skin disease is based on data collected from medical records in specialized centers. Unfortunately, this does not necessarily represent the prevalence of skin disease in the community.

Moreover, when estimating the health needs of the population, these figures are seldom accompanied by data on community prevalence. There are limited studies of the impact of skin disease on health care systems in DC.

In 1992, dermatological disorders were reported as the second and fourth most frequent complaints at Shebe and Agaro health centers in the tropical foothill region of Illubabor province, south-western Ethiopia.

Tropical dermatology used to be known as colonial dermatology, which has more of a cultural rather than geographic significance. Today, this terminology underlines the tie between this discipline and the DC. In fact, most cases of dermatological pathologies occur and are increasing in tropical regions, not necessarily because of climate conditions which, admittedly, can favor the development of certain pathogenetic microorganisms or saprophytes, but rather because of the dramatic level of poverty, the lack of public and personal hygiene, the difficulty in obtaining water, poor housing, malnutrition, and the lack of education, especially in the rural areas (all factors that have little to do with the difference among the races). To these unfavorable climatic and environmental conditions, political and cultural influences, often characterized by absurd ethnic conflicts sustained by wealthy industrialized countries, have to be added.

In the last few years, in the area of dermatology and venereology, there has been a return of illnesses that, in our national territory, had apparently disappeared some time ago. Is it a result of this migratory phenomenon that sees millions of people fleeing from the Southern Hemisphere in the hope of finding a future in Europe, in the USA, in Canada, or in Australia? Or does it depend on the rise in tourism that sees people from the Northern Hemisphere looking for holidays in more exotic and unexplored places? Certainly the two situations, although for different reasons, have something in common: the speed of movement of large numbers of people reduces the distance between developing tropical countries and the industrial countries of the north, eliminating the borders which once upon a time contained the illnesses. We are in the middle of a pathology that can be described as omnipresent due to the movement of hundreds of millions of people from one end of the planet to the other.

Viruses, bacteria, and fungi no longer seem to be confined within specific boundaries and are spreading to areas where it seemed they had been eliminated forever.

Skin diseases have only recently been considered as a possible public health problem in DC. Data supporting this matter are scarce.

Communicable diseases and nutritional problems are major health problems in DC. Among all diseases, infectious and



Figure 1 Kwashiorkor: erythematous cyanotic lesion, with a painted aspect in a child from Ethiopia

parasitic diseases remain the biggest killers, and they account for one-fourth of the global burden of diseases.¹⁰

In vast tropical areas of South America, Africa, and Asia, more than one-third of the population lives in conditions of chronic malnutrition. Nutritional disorders may be defined as pathological conditions caused by qualitative or quantitative deficiency or derangement of nutrient elements essential to normal tissues.

The malnutrition diseases of a dermatological interest are principally caused by a calorie-protein deficiency and by hypovitaminosis: Kwashiorkor, hypovitaminosis A and pellagra, but are they tropical diseases or poverty correlated diseases (Fig. 1)?

Neglected Diseases

At least 1 billion people, one-sixth of the world's population, or one person in six, suffer from one or more neglected tropical diseases (NTDs), such as Buruli ulcer, cholera, cysticercosis, dracunculiasis (guinea-worm disease), foodborne trematode infections, hydatidosis, leishmaniasis, lymphatic filariasis, onchocerciasis, schistosomiasis, soil-transmitted helminthiasis, trachoma, and trypanosomiasis, although there are other estimates that suggest the number could be much higher.¹¹

Several of these diseases, and others such as dengue, are vector borne. Often, those populations most affected are also the poorest and most vulnerable and are found mainly in tropical and subtropical areas of the world. Some diseases affect individuals throughout their lives, causing a high degree of morbidity and physical disability and, in certain cases, gross disfigurement.

Today, neglected diseases can be usefully considered as a group because they are concentrated almost exclusively in impoverished populations living in marginalized areas, the populations left behind by socio-economic development.¹²

Although medically diverse, neglected diseases share features that allow them to persist in conditions of poverty, where they cluster and frequently overlap.

Unsafe water and poor sanitation sustain transmission cycles and favor the proliferation of vectors. Lack of access to health services, low levels of literacy, inadequate nutrition, and poor personal hygiene all help to increase vulnerability to infection and work against prevention. Where curative interventions exist, they generally fail to reach populations early enough to prevent permanent impairments. Conditions of poverty also work to exclude affected populations from the social systems set up to safeguard health as a fundamental human right.¹³

Neglect occurs at three main levels. At the community level, fear and stigma can sometimes lead the persons involved and their families to conceal their condition.

At the national level, these diseases are often hidden, out of sight, poorly documented, and silent, as those most affected have little political voice.

As a result, neglected diseases are rarely given high priority by ministries of health or finance in endemic countries.¹⁴

Neglected diseases lack visibility at the international level as well. Tied as they are to specific geographic and environmental conditions, they are not perceived as direct threats to industrialized countries. They impair or permanently disable millions of people, but cause comparatively few deaths. This low mortality diminishes their stature when seeking to gain international attention and funds, and they are frequently given low priority in the agendas of development cooperation agencies.¹⁵

For a large group of these diseases, mainly helminthic infections, effective, inexpensive, or donated drugs are available for their prevention and control.

These tools, when used on a large scale, are able to wipe out the burden caused by these ancient scourges of humanity.

For leprosy, treatment with effective antibiotics is leading to the elimination of such ancient disabling disease. There is also a cost-effective approach to treating yaws, which could lead to elimination and final eradication of this debilitating disease that may cause gross deformation.

There is a second group of NTDs for which the only clinical option currently available is systematic case-finding and management at an early stage. These diseases include Buruli ulcer, Chagas disease, cholera and other diarrheal diseases, human African trypanosomiasis, and leishmaniasis. Simple diagnostic tools, and safe and effective treatment regimens need to be developed urgently for some of these diseases. However, even for these infections, systematic use of the present, imperfect tools at an early stage can dramatically reduce mortality and morbidity.¹⁶

Communicable diseases are responsible for 77% of the mortality gap and 79% of the DALY gap between the world's poorest 20% and the richest 20%.

Although the burden is considerable, it is still considered to be an underestimate of the extent of the problem. A 92% reduction in the burden of communicable diseases in poorest countries would be required to close the mortality gap with the richest countries.¹⁷

The leading causes of death in the poorest countries are respiratory infections, diarrheal diseases, and perinatal conditions, all of which are preventable and easily curable.

Based upon the situation in 1990, it was estimated that by 2020, deaths attributable to communicable disease would fall from 59 to 44% of all deaths among the global poor. Deaths from non-communicable disease among the poor would rise from 32 to 42%. Disability adjusted life years (DALY) loss from communicable disease would fall from 64 to 43%, whilst DALY loss from non-communicable diseases would increase from 23 to 40%.¹

However, as communicable diseases would also be declining in richer populations, they would continue to be much more important for the poor.

Indeed the estimates for 2020 of 44% of deaths and 43% of DALY loss caused by communicable diseases among the global poor can be compared to the 15% of deaths and 20% of DALY loss in the world as a whole and 7% of deaths and 8% of DALY loss among the global rich.¹

The Role of the Dermatological Science

Dermatology is an exceptionally appropriate specialty to meet the threats that include poverty, climate change, the mobility and migration of populations, emerging and neglected diseases. Skin care is needed for problems that of course are managed by the profession of dermatology: but it is a small profession in a minority when estimating who looks at and touches the skin. Indeed, it is because carers of the skin are mostly not dermatologists that one should analyze exactly who needs to learn best practice and for exactly what conditions of the skin. Several of the most common and demanding skin problems are not numbered amongst the diseases attended to by, for example, the urban-based private practitioner of dermatology. Some skin conditions are managed within the family and others hardly leave primary care.¹⁸

Very common community problems include skin infections, bacterial, fungal, and parasitic, as well as sexually transmitted infections. The emerging epidemic of HIV/AIDS presents first in general health services in the skin and mucosae, often as clinical indicators of immune status.¹⁹

In the Tropics, diseases such as leprosy, leishmaniasis, and onchocerciasis must be managed by the general health services trained to look knowledgeably at the skin.

It is in the absent skin category that one lists some of the most numerous, difficult to manage, and costly problems. These include pressure ulcers, leg ulcers, foot ulcers due to leprosy or diabetes, as well as those ulcers named Buruli and



Figure 2 A squamous cell carcinoma arising from a scar

Tropical. There are also the eroded blisters of genetic, infective, autoimmune, or drug-induced etiology.

Highly prevalent in countries without regulation of inflammable agents are burns and scalds.

Trauma is common too, and is mostly due to road accidents and conflict.

Our experience and several previous studies performed on general population of tropical countries have shown that the dermatological activity, both in primary and specialist centers, deals mostly with not so exotic diseases, but with more usual conditions, such as eczema, psoriasis, lupus, lichen, mycoses, pyodermitis, sexually transmitted diseases, HIV/AIDS, and more recently, skin cancers: melanoma and squamous cell carcinoma (Fig. 2).

The so-called tropical infections, even if not as frequent as generally thought, have to be diagnosed and treated early, since they could be lethal.

In Western countries, health operators usually overestimate the incidence of tropical diseases in the immigrants and underestimate the occurrence of ubiquitous conditions. On the other hand, they usually do not recognize severe tropical conditions (the so called Salgari's syndrome).^{20,21}

The health operators in the tropical countries often have the knowledge to make the correct diagnosis of these diseases,

but they lack economic resources and technical facilities to treat adequately these conditions.

What is more, scientific research does not study these conditions because of the lack of funding, so the new drugs are not available.

To improve the health status of poor and migrant populations, the international community should promote campaigns in those countries, collaborating with the local authorities. Healthy skin for all should not be just a promotional move, but become the driving force for the dermatologists all over the world.

Conclusion: The Need of a Global Ethical System

The principal cause of the threat to the Earth lies in the kind of relationship, which in the past few centuries, human beings have had towards it and its resources, a relationship of command, of denial of its alterity, and lack of the unavoidable care and respect which are due to any otherness. The project of techno-science, with its present characteristics, was made possible because the basic idea was domination, that is, being *over* and *not with* nature, and because the awareness of a large biotic, terrestrial, and cosmic community, where human beings are rooted, was disrupted.

The project of techno-science brought forth countless benefits for the human existence. It has led to the space outside the Earth, thus creating a survival possibility for the species *Homo sapiens/demens* in case of a prospective anthropological catastrophe. Moreover, it has made possible, as never before in human history, better lifestyles, and in that sense, it has developed an invaluable liberating function. Today, however, maintaining the prevailing and anti-ecologic model can lead to insuperable, and therefore devastating, limits.

At present, in order to keep the natural and cultural heritage we are endowed with, a change is required. Unless we switch to a different civilization model, unless we are able to invent more benevolent relationships, more synergic with nature, and more collaborating among the different peoples, cultures, religions, it will be difficult to maintain the sustainability level which is necessary for the continuation of our terrestrial and cosmic adventure. We risk self-destruction.

We must enter into ethical bonds between each other, not based on an "enlightened" reason but on *pathos*, an altruistic feeling which is disclosed through loving care, able to stir the people, and to lead them to an original liberating and solidarity-oriented lifestyle.

Inside such frame, a "new" sensitivity and a "new" *ethos* should emerge.

By *ethos* we mean the system of inspirations, values, and principles that would orient/guide the human relationships towards nature, society, alterities, ourselves, and the trans-

endent sense of life, towards God. This kind of *ethos* cannot be born from mere will, like armed Athena jumped out of Jupiter's head. Ethics is formed through a different vision. Any new way of seeing things arises from a deep commotion in the experience of the Being, from a new perception of the Whole, connected in all its parts and linked to the original Source from which all existing beings are issued.

Conflicts of interest

The author has declared no conflicts of interest.

References

- Morrone A, Racalbutto V, eds. *Health Systems and Skin Diseases: The Case of Ethiopia*. punto in bianco, Roma, 2007.
- UNDP. *Human Development Report 2003. Millennium Development Goals: A Compact Among Nations to End Human Poverty*. Oxford University Press. UNFPA (2003) "Population and Poverty: Achieving Equity, Equality and Sustainability". PDS Number 8, New York.
- Ziglio E, Barbosa R, Charpak Y, et al. *Health System Confront the Poverty*. Copenhagen: Regional Office for Europe, WHO, 2003.
- Sen A. *Development As Freedom*. New York: Oxford University Press, 2000.
- Commission on Health Research for Development. *Health Research: Essential Link To Equity in Development*. New York: Oxford University Press, 1990 (<http://www.cohred.org>).
- Commission on Macroeconomics and Health. *Macroeconomics and Health: Investing in Health for Economic Development*. Geneva: World Health Organization, 2001.
- WHO. *The World Health Report 2006. Health Shaping the Future*. Geneva: WHO, 2006.
- Morrone A, Hercogova J, Lotti T. *Dermatology of Human Mobile populations*. Bologna: MNL, 2004.
- Carballo M, Divino JJ, Zeric D. Migration and health in the European Union. *Trop Med Int Health* 1998; 3: 936-944.
- Hotez P, Remme J, Buss P, et al. Combating tropical infectious diseases: report of the diseases control priorities in Developing Countries project. *Clin Infect Dis* 2004; 38: 871-878.
- Holveck JC, Ehrenberg JP, Ault SK, et al. Prevention, control, and elimination of neglected diseases in the Americas: pathways to integrated, inter-programmatic, inter-sectoral action for health and development. *BMC Public Health* 2007; 7: 6.
- Davey G, Newport M. Podoconiosis: the most neglected tropical disease? *Lancet* 2007; 369: 888-889.
- Miller P. Status of research and development for control of tropical diseases: hypocrisy, indifference or lack coordination. *Med Trop (Mars)* 2006; 66: 542-548.

- 14 Molyneux DH. "Neglected" diseases but unrecognised successes – challenges and opportunities for infectious disease control. *Lancet* 2004; 364: 380–383.
- 15 Koech DK. Accessibility and affordability of malaria intervention, treatment and prevention in Africa. *Afr J Health Sci* 2006; 13: i.
- 16 Riley LW, Ko AI, Unger A, *et al.* Slum health: diseases of neglected populations. *BMC Int Health Hum Rights* 2007; 7: 2.
- 17 Chitsulo L. A new impetus is required for neglected infectious disease. *Ghana Med J* 2005; 39: 80.
- 18 Ryan TJ. Healthy skin for all. *Int J Dermatol* 1994; 33: 829–835.
- 19 Krishnam Raju PV, Raghurama Rao G, Ramani TV, *et al.* Skin disease: clinical indicator of immune status in human immunodeficiency virus (HIV) infection. *Int J Dermatol* 2005; 44: 646–649.
- 20 Morrone A, Toma L, Franco G. Skin diseases highlighting essential global public health priorities. *Int J Dermatol* 2005; 44: 384–390.
- 21 Morrone A, Veraldi S. "Salgari's Syndrome": A new syndrome for dermatologists. *J Eur Acad Dermatol* 2002; 16 (Suppl. 1): 221.