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Platinum Opinion

Greetings from Africa: The Emergence of Tropical Urological Diseases in Europe. We Had Better Be Prepared!

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During the last decades we have been witnessing significant migration brought about by various local conflicts, global inequities, and ever-increasing globalisation. In 2017, more than 250 million people were living away from their country of birth [1].

Europe in particular is affected by immigration, mainly from sub-Saharan African countries. Several hundred thousand people pass through the Mediterranean basin each year to escape war and poverty in their own country in the hope for a new life. The migration of people seeking a better future has been an integral part of human history and brings many favourable changes for the lands involved. However, movement of a large number of people also involves the movement of a large number of vectors that might be the cause of a considerable number of infectious diseases.

The risk of the transmission of infectious diseases during migration is higher among migrants themselves than in the host population [2], although the host population can also be affected. The extent of the risk depends on many factors: the health status of the migrants, accessibility to treatment and prevention in their countries of origin, and the conditions under which the migration phenomenon takes place. The local population often has a worse prognosis because of an absence of immunity to some infections or uncommon pathologies unknown at these latitudes. Poor preparation by health personnel and health systems for diagnosing and treating unusual pathologies further worsens the situation. This often leads to a waste of resources because of unnecessary diagnostic tests.

If they find a favourable substrate, some infectious agents can become endemic and represent a challenge for

local practitioners, including urologists. The best example in Europe occurred in Corsica in 2013 with the discovery of foci of urogenital schistosomiasis that could have infected hundreds of tourists and locals [3]. The importation of *Schistosoma haematobium* in this instance was attributed to infected individuals coming from certain areas of West Africa, particularly Senegal.

Investigation revealed that the imported parasite had found a local variant of the *Bulinus* snail in the River Cavu that was suitable as a host and ensured its diffusion. Furthermore, freshwater snail species such as *Bulinus contortus*, *Bulinus truncatus*, and *Planorbium metidjensis*, which are intermediate schistosoma hosts, are also present in some areas of Spain and Portugal, which are therefore at possible risk for the re-emergence of this disease [4,5].

The possible spread of schistosomiasis to countries where the disease has previously been unknown could lead to a non-negligible delay in diagnosis that could further aggravate the risk of spread and worsen the clinical prognosis of affected patients. In fact, the typical symptomatology of bilharzia, characterized by haematuria, urinary frequency, burning micturition, and suprapubic discomfort, could easily be misinterpreted by European practitioners and mistaken for urinary tract infection or urinary tract neoplasms [6].

Similar trends for increases in the incidence and/or prevalence in general or in the foreign-born population have been identified in some European countries and for other diseases such as urogenital tuberculosis, filariasis, and echinococcosis [7–10].

In 2018 we distributed an online survey to approximately 200 urologists and urology residents from different

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European countries to assess their knowledge of these diseases. The survey, written by South African urologists, comprised multiple-choice questions on the diagnosis, pathophysiology, and treatment of these important diseases. The questions had been classified as easy/intermediate level for African undergraduates.

The results were shocking: more than 80% of the interviewees showed very poor general knowledge, with urology residents accounting for almost 90% of this subgroup. The results were better for practitioners who had undergone a period of training or work experience in African countries. Almost all the respondents considered their knowledge to be inadequate and would not feel confident in dealing with these pathologies independently. The knowledge for each question was significantly worse in comparison to the control group consisting of African urologists and urology trainees (members of the Pan African Urological Association and of the South African Urological Association).

Although European urologists obviously did not require the same knowledge possessed by their African colleagues, the data reveal our total inadequacy and lack of preparation for facing a possible further increase in the incidence of these emerging pathologies. Organization of simple face-to-face and webinar learning courses could be a simple first step in the training response necessary to increase awareness and focus in this field.

This is not meant to be an alarmist message. We do not believe that the health risk due to the current migration phenomenon and from the importation of tropical infectious urological diseases will create devastating health problems for local populations. However, as the saying goes,

the best preparation for good work tomorrow is to do good work today, so we had better prepare to face this potential threat.

Conflicts of interest: The authors have nothing to disclose.

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