



LETTER TO THE EDITOR

The possible impact of SARS-COV-2 on neglected tropical diseases in Europe: the out of spotlights emerging of schistosomiasis

GUGLIELMO MANTICA¹, MARIANO MARTINI², NICCOLÒ RICCARDI³¹ Department of Urology, Policlinico San Martino Hospital, University of Genoa, Genoa, Italy;² Department of Health Sciences, University of Genoa, Genoa, Italy; ³ Department of Infectious, Tropical Diseases and Microbiology, IRCCS Sacro Cuore Don Calabria Hospital, Negrar di Valpolicella, Verona, Italy

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Dear Editor,

The novel SARS-CoV-2 coronavirus and the resulting infection, CORonaVirus Disease 19 (COVID-19), is posing an enormous threat to healthcare, economy and society [1]. Globally, over the last year, the efforts of most Nations and non-governative health care organizations have been directed towards the containment of the infection, the reorganization of health care systems, the research for treatments and vaccines against this disease. COVID-19 has been under spotlights regarding every aspect of our life during the whole 2020, monopolizing the attention of the media as well as the provider of health care policies. Needless to say that when there is something under spotlights, there must be some other things out of these lights. In particular, little is known about how COVID-19 is impacting the millions of people worldwide with neglected diseases.

Over the last decades, Europe is facing a slow increasing incidence of neglected tropical diseases that were previously considered as uncommon [2]. In particular, schistosomiasis is one of the neglected diseases that has increasingly been reported in healthcare facilities in Europe. Schistosomiasis, also known as snail fever or bilharzia, is a parasitic infection that has evolved together with the humankind and its presence were already documented in Egyptian medical papyri, Assyrian medical texts and some Hebrew Bible passages [3]. Schistosomiasis is a disease spread by contact with fresh water, in endemic areas, contaminated with parasitic flatworms called schistosomes. Literature has linked bladder cancer, mostly squamous cell type, with long-term *Schistosoma haematobium* infections.

Until few years ago, urogenital schistosomiasis was not endemic in Europe. However, in the last decade, the first cases of autochthonous outbreak have been reported in Corse (France) and a few hundred cases have been diagnosed since then [4]. Similarly, patients suffering from schistosomiasis, mostly migrants or travelers returning from endemic areas, have been diagnosed in numerous hospitals in other European countries, such as Italy, Spain, Germany and Slovakia [5-8]. In Europe, schistosomiasis is an underreported disease

that can certainly be defined as neglected. There is little knowledge of the disease, its symptoms, effects and therapies not only by patients and public opinion, but also by doctors themselves. In fact, a recently published survey highlighted an insufficient preparation of European urologists on natural history, diagnosis and management of this pathology, especially for those who had not previously worked in a endemic area [9].

To confirm this, an Italian multicentric study conducted on more than a hundred of patients, highlighted that an high proportion of migrant patients were tested late after arrival (median delay about 31 months) [5].

SARS-CoV-2 represents a threat to schistosomiasis control.

The pandemic has taken away that little spotlight from this neglected pathology, further worsening the little efforts to screen and treat it. SARS-CoV-2 reduced the time spent by Infectious Diseases specialists training on tropical medicine and imported diseases [10].

Furthermore, patients with schistosomiasis, mainly migrants, afraid of looking for care in times of pandemic, may decrease the chance of effective treatment and care. In this light, the possible role of infectious disease specialists might be to raise awareness among health care professionals in order to implement adequate management strategies.

Ultimately, a coordinated effort by the European urological, infectious diseases and preventive scientific societies may be required in order not to forget this already neglected disease.

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Conflicts of interest statement

The authors declare no conflict of interest.

Authors' contributions

GM and NR conceived the study, GM, MM, NR drafted and revised the manuscript, performed a search of the literature. All authors critically revised the manuscript and all authors have read and approved the latest version of the manuscript.

References

- [1] Costantino C, Fiacchini D. Rationale of the WHO document on Risk Communication and Community Engagement (RCCE) readiness and response to the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and of the Italian Decalogue for Prevention Departments. *J Prev Med Hyg* 2020;61:E1-E2. <https://doi.org/10.15167/2421-4248/jpmh2020.61.1.1502>
- [2] Mantica G, Van der Merwe A, Bonkat G. Greetings from Africa: the emergence of tropical urological diseases in Europe. We had better be prepared! *Eur Urol* 2019;76:140-1. <https://doi.org/10.1016/j.eururo.2019.05.012>
- [3] Di Bella S, Riccardi N, Giacobbe DR, Luzzati R. History of schistosomiasis (bilharziasis) in humans: from Egyptian medical papyri to molecular biology on mummies. *Pathog Glob Health* 2018;112:268-73. <https://doi.org/10.1080/20477724.2018.1495357>
- [4] Boissier J, Grech-Angelini S, Webster BL, Allienne JF, Huysse T, Mas-Coma S, Toulza E, Barré-Cardi H, Rollinson D, Kincaid-Smith J, Oleaga A, Galinier R, Foata J, Rognon A, Berry A, Mouahid G, Henneron R, Moné H, Noel H, Mitta G. Outbreak of urogenital schistosomiasis in Corsica (France): an epidemiological case study. *Lancet Infect Dis* 2016;16:971-9. [https://doi.org/10.1016/S1473-3099\(16\)00175-4](https://doi.org/10.1016/S1473-3099(16)00175-4)
- [5] Comelli A, Riccardi N, Canetti D, Spinicci M, Cenderello G, Magro P, Nicolini LA, Marchese V, Zammarchi L, Castelli F, Bartoloni A, Di Biagio A, Caligaris S, Gaiera G. Delay in schistosomiasis diagnosis and treatment: a multicenter cohort study in Italy. *J Travel Med* 2020;27:taz075. <https://doi.org/10.1093/jtm/taz075>
- [6] Salas-Coronas J, Vázquez-Villegas J, Lozano-Serrano AB, Soriano-Pérez MJ, Cabeza-Barrera I, Cabezas-Fernández MT, Villarejo-Ordóñez A, Sánchez-Sánchez JC, Abad Vivas-Pérez JJ, Vázquez-Blanc S, Palanca-Giménez M, Cuenca-Gómez JA. Severe complications of imported schistosomiasis, Spain: a retrospective observational study. *Travel Med Infect Dis* 2020;35:101508. <https://doi.org/10.1016/j.tmaid.2019.101508>
- [7] Janda A, Eder K, Fressle R, Geweniger A, Diffloth N, Heeg M, Binder N, Sitaru AG, Rohr J, Henneke P, Hufnagel M, Elling R. Comprehensive infectious disease screening in a cohort of unaccompanied refugee minors in Germany from 2016 to 2017: a cross-sectional study. *PLoS Med* 2020;17:e1003076. <https://doi.org/10.1371/journal.pmed.1003076>
- [8] Gulyás K, Soldánová M, Orosová M, Oros M. Confirmation of the presence of zoonotic *Trichobilharzia franki* following a human cercarial dermatitis outbreak in recreational water in Slovakia. *Parasitol Res* 2020;119:2531-7. <https://doi.org/10.1007/s00436-020-06751-y>
- [9] Mantica G, Van der Merwe A, Terrone C, Gallo F, Zarrabi AD, Vlok AL, Ackermann HM, Territo A, Esperto F, Olapade-Olapa EO, Riccardi N, Bongers M, Bonkat G. Awareness of European practitioners toward uncommon tropical diseases: are we prepared to deal with mass migration? Results of an international survey. *World J Urol* 2020;38:1773-86. <https://doi.org/10.1007/s00345-019-02957-7>
- [10] Tilli M, Olliaro P, Gobbi F, Bisoffi Z, Bartoloni A, Zammarchi L. Neglected tropical diseases in non-endemic countries in the era of COVID-19 pandemic: the great forgotten. *J Travel Med* 2021;28:taaa179. <https://doi.org/10.1093/jtm/taaa179>

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Correspondence: Mariano Martini, Department of Health Science, University of Genoa, largo R. Benzi 10 Pad.3, 16132 Genoa, Italy - Tel./Fax: +39 10 353 85 02 - E-mail: mariano.yy@gmail.com - mr.martini@unige.it

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