

Impact of the global COVID-19 outbreak on the management of other communicable diseases

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Dear Editor,

The recent WHO Coronavirus 2019 (COVID-19) Situation Report -59, dated 19 March 2020, reported transmissions in many countries other than China. This includes countries with a high number of reported cases and deaths in the Western Pacific region (e.g. South Korea, Japan and Singapore) and the European region (e.g. Italy, France and Spain),¹ but it is impacting on clinical practice globally.

We observed that COVID-19 is increasingly the top differential diagnosis in any person with a fever and/or cough regardless of duration, leading to a prompt chest radiograph and isolation of at-risk patients with testing of SARS CoV-2. While such practices mitigate the outbreak, we urge the medical community not to forget other communicable diseases, where appropriate, in the differential diagnoses of patients. Tuberculosis, measles, pneumococcal disease and other respiratory pathogens can present with similar symptoms (see Table), and should be tested where relevant, before de-isolation of patients, or risk transmission of these other infections.

While over-testing for COVID-19 is discouraged, one should be vigilant for atypical presentations, especially in the elderly and those with pre-existing disease such as cancer, diabetes mellitus and heart disease,² where COVID-19 infection is associated with severe disease and higher mortality. Just like tuberculosis, where the elderly are at risk to reactivate and represent a growing challenge worldwide,³ COVID-19 diagnosis may be challenging in this population due to technical difficulties in obtaining quality respiratory samples for testing, which can result in false-negative tests. This may lead to delayed diagnosis or premature de-isolation of COVID-19 patients.

Dual pathologies with COVID-19 have been reported,⁴ highlighting the need to be vigilant if a suspected infectious disease does not behave as expected. The consequence of missing dual pathologies can be amplified by the media, leading to an increase in SARS CoV-2 testing and corresponding re-deployment of infection prevention resources for suspect cases. We urge careful consideration of appropriate infection prevention measures in the correct setting, including the use of face masks.⁵

Finally, patients are generally now more averse to visiting healthcare facilities unless there is compelling need. This leads to the use of telemedicine where available, but adverse drug events may be missed, and prescriptions are either not collected or not delivered, and contributes to a decrease in human interactions which is fundamental to all patient-clinician relationships. Patients need to be educated on the need for visits to clinics as required during this period.

In these unusual times, when COVID-19 dominates the lay and medical press, we need to remember that other infections and diseases exist, while also not letting our guard down against this novel coronavirus. Use of resources for testing and isolation need to be prioritised to those who need them most, while we continue to educate and manage our other patients. We invite our colleagues working in the community of lung disease to engage in further debate on this topic.

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Table COVID-19 cases and incidence rate of other communicable diseases in Italy and Singapore*

	Italy	Singapore
Population, million	60.6	5.7
COVID-19 total cases (as of 19 March 2020)	35,713	313
Tuberculosis [†]	7.0 per 100,000 [‡]	39.0 per 100,000 [§]
Measles [†]	8.4 per 100,000 [¶]	0.6 per 100,000 [§]
Invasive pneumococcal disease [†]	2.5 per 100,000 [#]	2.4 per 100,000 [§]

* Numbers as of 19 March 2020 in WHO COVID-19 Situation Report.

[†] Incidence rates per 100,000.

[‡] Source: WHO Tuberculosis Country Profile 2018, https://extranet.who.int/sree/Reports?op=Replet&name=%2FWHO_HQ_Reports%2FG2%2FPROD%2FEXT%2FTBCountryProfile&ISO2=IT&LAN=EN&outtype=html.

[§] Communicable Disease Surveillance, Singapore 2018.

[¶] Source: <https://www.ecdc.europa.eu/sites/default/files/documents/Measles-and-Rubella-Surveillance-2017.pdf> Accessed March 2020.

[#] Source: Invasive pneumococcal disease: 1248 in 2015 <https://www.ecdc.europa.eu/en/publications-data/invasive-pneumococcal-disease-annual-epidemiological-report-2015> Accessed March 2020.