

Ebola 2014-2015 and SARS-CoV-2 2019-2020: Two distinct situations but similar collateral damage

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Short Communication

A 42-year-old woman was admitted to A & E at the Toulouse University Hospital for asthenia, pyrexia and frontal headache on May 6, 2020. She was diagnosed as suffering from a classical meningitis syndrome. This patient had been infected with HIV-1 in 2013 and had since been effectively treated. Her HIV-1 viremia was undetectable when last checked in December 2019.

She reached the end of her antiretroviral treatment on March 16, during the lockdown in France. As she was afraid of getting the SARS-CoV 2 virus outside her home, she stopped her treatment and did not renew it until she was admitted to A & E.

Her HIV-1 viremia was high (20×10^3 copies/ML) with a CSF HIV-1 concentration of 500×10^3 copies/ML, suggesting rapid virus replication. Effective anti-retroviral treatment quickly reduced her symptoms and the patient was discharged soon after.

This case illustrates the medical collateral damage that can occur in lockdown during the SARS-CoV-2 pandemic. Similar incidents occurred in 2014-2015 when the outbreak of EBOLA disease in Guinea, Liberia and Sierra Leone overwhelmed their poor state healthcare systems. The resulting breakdown severely affected the therapeutic management of endemo/epidemic infectious diseases, the vaccination programs, and the maternal health services. One of the direct consequences of this disruption was increased deaths from AIDS, malaria and tuberculosis [1]. Disruption of the vaccination programs had long standing adverse effects on the transmission rates of vaccine-preventable diseases like measles [2].

One outcome of the SARS-CoV-2 pandemic is the realization that the health systems of developed countries are fragile. This is true even for France, which spends 11.3% of GDP each year on health (the

highest in Europe) and ranks high up the human development index (39/228). The situation is undoubtedly similar in many developed countries affected by COVID 19.

We do not yet know what will happen after the first wave of the pandemic. We could be confronted with a disastrously fatal second wave like that of the 1918 Spanish flu pandemic. Or perhaps the situation will resemble that of the SARS-CoV epidemic, which died out spontaneously.

Whatever the outcome, it is essential that we maintain a permanent, efficient health care system capable of treating somatic chronic diseases, first and foremost cancer, psychiatric diseases and serious acute illnesses requiring rapid intervention, like stroke and myocardial infarction. A second priority is to keep vaccination programs, particularly in infants and certain fragile populations, up to date; 44.000 infants from 3 to 18 months old were not given their compulsory vaccines against common infectious diseases during the lockdown period in France [3].

New paradigms are urgently needed, including new effective information circuits and new contributors to new care structures. If not, the number of deaths attributed to Covid-19 could be surpassed by other chronic, endemo/epidemic or acute diseases.

References

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