

WHO to probe claims that Dutch scientists restricted access to novel coronavirus

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The World Health Organization is to investigate claims by Saudi Arabia that a Dutch laboratory's patenting of a novel coronavirus variant is hindering research into the pathogen that has claimed 23 lives in several countries.

Saudi deputy health minister Ziad Memish told the World Health Assembly last week that samples of the Middle East respiratory syndrome (MERS) coronavirus, which first emerged in his country, had been sent abroad without permission. "We are still struggling with diagnostics and the reason is that the virus was patented by scientists and is not allowed to be used for investigations by other scientists," he said.

WHO director general Margaret Chan promised to "look at the legal implications together with the Kingdom of Saudi Arabia." She added: "No IP [intellectual property] should stand in the way of you, the countries of the world, to protect your people."

Memish told the assembly that "there was a lag of three months [when] we were not aware of the discovery of the virus." MERS coronavirus was first isolated in Saudi Arabia in June 2012 by microbiologist Ali Zaki from a man who died of a mysterious respiratory illness.

Zaki sent samples of the virus to Erasmus Medical Centre in the Netherlands, where virologist Ron Fouchier sequenced it and in September identified it as a novel coronavirus strain. Zaki then notified the medical alert website ProMED that a novel virus had been identified. Meanwhile, Memish told the WHO assembly that "it was patented, and contracts were signed with vaccine companies and antiviral drug companies."

Zaki was later fired from his post in Saudi Arabia and has returned to work in his native Egypt. "I am happy to be fired because I did a favour for humankind," he told the Canadian Broadcasting Corporation (CBC). Memish told *Nature News* that Zaki had been fired for circumventing national procedures "either intentionally or inadvertently."

Erasmus "strongly refuted" the Saudi government's characterisation of its actions and denied signing contracts with drug companies. Albert Osterhaus, head of virology at Erasmus, told the *BMJ*: "We have patent applications submitted and that is on the sequences and the possibilities to eventually make diagnostics, vaccines, antivirals, and the like. It's quite a normal thing if you find something new to patent it. So far we have distributed the virus and also the sequences to all the laboratories that would like to be working on it for public health reasons,

not only government laboratories but also university laboratories."

He added, "We have not struck any deal with any company because we think it's too premature. At the end of the day, if you want something to happen for the benefit of public health—including making a vaccine, antivirals, whatever—you need to have at least some intellectual property. Otherwise the companies will not be interested."

Samples were transferred under a material transfer agreement, "as is usual to make sure first of all [that] the labs had the proper facilities for handling the virus, and secondly [that] we restricted any commercial things because we have not settled it ourselves," Osterhaus said.

Canada's National Microbiology Laboratory (NML), which received a sample from Erasmus, initially criticised the agreement's restrictions, including barring the laboratory from sending the material to other researchers. NML scientific director Frank Plummer told the CBC last week that Erasmus imposed "pretty tight restrictions around how it could be used. So there was a lot of negotiation and a lot of lawyers involved both with us and the Americans and others around the world, which slowed things down quite a bit."

Later, he said in a statement: "While there were some delays and restrictions . . . in obtaining this virus, it is important to note that NML researchers are regularly exchanging information and collaborating closely with their Dutch colleagues to advance scientific understanding on this emerging infectious disease." Osterhaus attributed Plummer's earlier complaints to a misunderstanding that has now been resolved.

Public Health England said that it had developed and shared a diagnostic test for MERS coronavirus with "unprecedented" speed and had not been impeded by patenting.

Fouchier, Zaki, and Memish were all coauthors of a recent article in the *Journal of Virology* announcing the formation of the Coronavirus Study Group.¹

1 de Groot RJ, Baker SC, Baric RS, Brown CS, Drosten C, Enjuanes L, et al. Middle East respiratory syndrome coronavirus (MERS-CoV); announcement of the Coronavirus Study Group. *J Virol* 2013, doi:10.1128/JVI.01244-13.

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