

Her Majesty Queen Mathilde visits Poliopolis

This past summer, thirty volunteers spent several weeks in Poliopolis, the container village of the University of Antwerp. On Tuesday 10 October, Her Majesty Queen Mathilde of Belgium visited the complex to learn more about the research into a new polio vaccine.

In April, a container village with 66 units was installed in the car park of Antwerp University Hospital. During the past months, two groups of fifteen volunteers spent four weeks in full quarantine in the village, which is called Poliopolis. They participated in a unique clinical trial of two new candidate polio vaccines, which were developed by an international team of researchers.

"The two trial phases went according to plan", explains Professor Pierre Van Damme, the head of the Centre for the Evaluation of Vaccinations (University of Antwerp). "The entire team spent many months, working day and night, before the first participant entered Poliopolis. This thorough preparation proved very useful. It was also the first time that our team implemented this new way of working."

About the vaccine candidates

Globally, the world saw the fewest number of children ever paralyzed by poliovirus last year, with the virus restricted to a few areas of Pakistan, Afghanistan and Nigeria. As the global polio program nears eradication, measures are being taken to ensure the world both achieves polio eradication and the necessary steps are taken to keep it polio-free.

This novel oral polio vaccine (nOPV) has the potential to further reduce the extremely rare instances of the live, weakened virus contained in the widely used oral polio vaccine (OPV) mutating, spreading, and causing paralysis in under-immunized populations. The hope is that, if successful, nOPVs will ultimately replace the current OPV stockpile set aside to respond to outbreaks after eradication is achieved.

Mystery guests

All the volunteers remained in Poliopolis for the duration of the clinical trial. "We scheduled plenty of activities including an hour of daily exercise, with a gym instructor. Every week, the participants also received a call from a mystery guest, such as Rik de Leeuw and Marcel Vanthilt. The team also organised a beer sampling evening (albeit in small quantities), a BBQ course, a poker evening, remote yoga lessons and much more. Also the presence of a psychologist proved invaluable."

Scientific publication

H.M. Queen Mathilde has granted her High Protection to the Centre for the Evaluation of Vaccination and has taken a keen interest in the evolution of vaccines in Belgium and abroad for many years. She has previously attended the research group's annual Valentine's Day vaccination conference on several occasions.

The Queen met with the people who participated in the project, including nurses, assistants, psychologists and one of the participants, in the container units, which were completely decontaminated after the clinical trial. Afterwards, Professor Pierre Van Damme gave her a tour of Poliopolis.

"Unfortunately, we were unable to share the scientific results of this clinical trial with Her Majesty", says Van Damme. "We are currently working on the first analyses but the results regarding virus

concentrations in the stool samples and the genetic stability of the respective vaccine virus strains will only ready by the end of the year at which point we will finalise the scientific publications."

New trial

The Bill & Melinda Gates Foundation is funding the development of the new oral polio vaccine. Van Damme: "The trial we conducted this summer was an important step in the development of new tools that could keep the world polio-free after the disease is eradicated. But there are still plenty of steps to be taken. A follow up trial in Belgium in adults is one such step.. The idea is to administer both candidate vaccines to approximately 200 volunteers, to further document the vaccines' safety profile and immunogenic capacity. Although this trial is still under planning, in principle; these participants will not have to be quarantined."

The university received a two-year permit for the container units. "Other clinical trials will be conducted in these containers, where necessary with people who must remain in quarantine for some time", according to Van Damme. "We are already in discussion with interested parties."

Further information?

Peter De Meyer, Spokesperson University of Antwerp: peter.demeyer@uantwerpen.be and + 32 (0)476 20 07 54.

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