

## Activists seek testing of Ganga water for COVID-19 treatment

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### Mission under Jal Shakti Ministry sends the pitch to ICMR

The National Mission for Clean Ganga (NMCG), an arm of the Jal Shakti Ministry that deals with the Ganga clean-up plan, has forwarded to the Indian Council for Medical Research (ICMR) a proposal to undertake clinical trials and examine if Ganga water can be used to treat **COVID-19** patients.

The proposal was made by a collective of activists involved in the clean-up of the river as well as in the litany of litigation surrounding it.

The thrust of the proposal is that research for over a century – and most recently an investigation by the CSIR-National Environmental Engineering and Research Institute, Nagpur – had found that the upper stretches of the Ganga had several species of bacteriophages. Phages, as they are also called, are viruses that specifically target bacteria and are also extremely strain-specific. While there is research to suggest that these phages may have anti-microbial properties and could potentially destroy bacteria such as *Mycobacterium streptococcus* and *Pseudomonas Yersinia*, it is unclear how phages – being viruses themselves – could have anti-viral properties.

COVID-19 is caused by SARS-CoV-2 virus infection. “There’s no evidence that viruses can, even in principle, be used to destroy other viruses. Phage therapy has its uses in experimental medicine and has been used to treat infections from antibiotic-resistant bacteria,” Sunit Singh, virologist, Benares Hindu University, told *The Hindu*.

### ‘Experimental medicine’

The proponents of the proposal — Anil Gautam, A.K. Gupta, Bharat Jhunjunwala and Narendra Mehrotra — said the Ganga “could have” anti-viral properties, but the scale of the pandemic and the need for new drugs and treatment mean that there could be “immense benefit” from undertaking such studies on the lines of “experimental medicine.”

Before being forwarded to the ICMR, the letter reveals, the NMCG discussed the feasibility of the proposal with NEERI, on April 24. NEERI, which is a Council of Scientific and Industrial Research organisation, has an ongoing study examining whether the phages in the Ganga water are responsible for destroying pathogens and delaying putrefaction.

“The considered opinion of CSIR-NEERI is that overall, clinical trial on water alone may not yield very useful results, though this would need the considered opinion of agencies such as ICMR,” notes the NMCG letter, signed by D.P. Mathuria, Executive Director, NMCG, and addressed to the Director General, ICMR. “...It is true Ganga water has special properties which is prominent in upper stretches. Since no virus related studies have been yet carried out, one could attempt a pilot in the Upper Regions of Ganga.”

Most studies have been done in the context of years-long movement that sees Ganga water as “unique,” particularly the water in the upper stretches of Rudraprayag and before Tehri.