6 January 2021

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Via e-mail: cmcell@tn.gov.in; hfsec@tn.gov.in

Subject: Regarding Tamil Nadu state government's decision to allow jallikattu events amidst the ongoing COVID-19 pandemic

Dear Ministers,

We, the 52 undersigned healthcare professionals, are writing to request that the Tamil Nadu state government withdraw its recent decision to grant permission to hold jallikattu events in the state amidst the grave public health risks posed by the ongoing COVID-19 pandemic.

Tamil Nadu is listed among the top four states reporting the highest number of COVID-19 cases, with a tally of 8,22,370 cases and a death toll of 12,177 as of 06 January.[1] To prevent the rapid spread of COVID-19 and to protect public health, as well as to ease the pressure on healthcare professionals, **non-essential activities such as jallikattu events, which lead to unnecessary gatherings of people, must not be allowed**.

We're aware that the state government has issued guidelines for the conduct of the event,[2] making it mandatory for participants to submit a COVID-19 negative certificate. However, **the reverse transcription-polymerase chain reaction (RT-PCR) test, which has become the gold standard method for ruling out COVID-19 infection, has been found to be variable and potentially unstable, as significantly high false-negative rates have been reported**.

A false-negative case is defined as one in which a person who, although infected with COVID-19, receives an initial negative result in the RT-PCR test and a confirmed positive result on a subsequent test.[3] One study reported a potentially high false-negative rate of RT-PCR testing for SARS-CoV-2 in the 610 hospitalized patients clinically diagnosed with COVID-19.[4] Eighteen patients were found to have a positive RT-PCR result after two consecutive negative results. One systematic review that included 34 studies of 12,057

COVID-19 confirmed cases reported false-negative rates between 2% and 33% in repeat sample testing.[5]

A crucial factor influencing the results of the RT-PCR test is the time from exposure to infection and the onset of symptoms, commonly known as the incubation period. **If testing is done immediately after exposure to the virus, it will most likely yield a false-negative result.** Although the false-negative rate is minimized one week after exposure, it remains high, at 21%.[6] **Thus, even with a COVID-19 negative certificate, there are higher chances that the participants of jallikattu events could be potential sources of COVID-19 infection, as the clinical samples might be collected at a period before the person actually manifests any symptoms.** Other factors include the lack of standardisation for specimen collection, delays or poor storage conditions before arrival in the laboratory, the use of inadequately validated assays, contamination during the procedure, insufficient viral specimens and load, and the presence of mutations that escape detection or PCR inhibitors.[7,8] **Thus, infected persons with false-negative COVID-19 certificates can still infect others.[9]**

The guidelines also require that spectators be allowed to attend only after a **body temperature check**. However, not everyone infected with COVID-19 develops a fever.[10,11] One study reported that even if the body temperature returned to normal after five days, still, the infectivity was documented to last up to 10 days after the initial infection. In fact, 83% of the patients in the study never developed a fever.[12] All this vividly demonstrates that a temperature check would be ineffective in screening out every person carrying the infection from attending the event.

The Tamil Nadu government plans to allow up to 300 participants in jallikattu events and 150 participants in Erudhu Vidum Nigazhchi. **In light of the highly contagious nature of the disease and the way participants and spectators inevitably come into close proximity in such mass gatherings, even with the precautions planned by the Tamil Nadu government in place, the risk of infections is high.**

Since the Tamil Nadu government legalised jallikattu in 2017, at least 22 bulls and 57 humans have reportedly died while 3,632 humans were injured in events organised throughout the state. Even more human deaths will likely occur because of COVID-19 if jallikattu events are allowed to be organised in the state. Currently, proven public health tactics such as social distancing, the use of face masks, hand washing, isolation, quarantine, and community containment are critical to control the spread of the disease.[13,14]

Moreover, because the mutant variant of the SARS-CoV-2 virus is being reported in 20 people from the United Kingdom in several cities, such as Delhi, Bengaluru, Hyderabad, and Pune, there is a more urgent need to ensure that the spread of the new variant is prevented among the masses and easing containment measures could prove dangerous.[15] **Tamil Nadu issued an order banning public celebrations on 31 December and 1 January 2021 to protect the public from COVID-19, and similar logic needs to be applied to prevent other non-essential mass gatherings. Therefore, we recommend that the Tamil Nadu government immediately withdraw its permission to conduct jallikattu events in the state.**

Sincerely,

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