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## Letter to Editor

### Persistence of SARS-CoV-2 antibodies beyond 6 months in health care workers in Mumbai

#### ARTICLE INFO

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#### Dear Editor

It is generally believed that antibodies against SARS-CoV-2 decline over time [1]. We have previously reported seroprevalence rates of SARS-CoV-2 binding antibodies in health care workers (HCW) at our hospital in June 2020 [2]. In that cohort of 244 HCW, 49 HCW had tested positive; 30 by Roche ECLIA (IgG and IgM) and 17 by Abbott CLIA (IgG). Of the infected HCW, 41 had mild symptoms and 8 were asymptomatic. The mildly symptomatic HCW had an uneventful recovery. We now report the follow up serostatus of these HCW in Dec 2020.

Forty seven of 49 HCW serostatus was estimated by Roche ECLIA after taking informed consent. Forty-six HCW (98%) were still seropositive. Eighty one percent had actually rise in the optical density (OD) while 19% had reduction in OD.

The persistence/increase in antibodies seen in our study population is in contrast to most studies that report decline in binding IgM, IgG and neutralizing antibody titers over time in patients recovering from COVID-19 [1,3,4]. Even after discounting the fact that some of this increase may be due to testing of HCW early in the course of their illness the first time, that OD is just a surrogate of the actual antibody titers and that these are binding and not neutralizing antibodies, the study results are significant. We hypothesize that this persistence/increase in antibodies is possibly due to boosting following repeated natural exposures. Vaccination against COVID-19 with two doses is also based on the prime-boost principle [5]. The boostability of the immune response against SARS-CoV-2 by natural infection/vaccination is likely to play an important role in increasing the longevity of protection against re infections.

#### Declaration of competing interest

None.

#### Acknowledgement

None.

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