

# Frequency of SARS-CoV2 infection in day care centers during reopening of the school activities

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## Abstract

Background: SARS-Cov2 already has over than 215 million people and more than 4.5 million fatalities. The beginning of the pandemic condition has led the health authorities in several countries to adopt no-pharmacological preventive measures, such as schools closures. The return took place at a time when the country had the highest rates of infection and mortality. In particular because of the circulation of the gamma variant (P.1) and the vaccination program were beginning in the country. Therefore, we aimed to investigate the prevalence of SARS-CoV2 in daycares after the return of educational activities. Methods The study involved seven childcare facilities. Swab samples from the nasopharynx and region were collected from each participant. This study was carried out between March 16 and September 3, 2021. Viral RNA was extracted using Invitrogen's RNA purification kit. Viral diagnosis was obtained using RT-PCR, through the TaqMan system. Viral detection was performed with Seegene panel, Allplex TM 2019-nCoV Assay kit. Results and Conclusion: The study population included 201 participants among daycare workers and children. Only one sample (0,5%) was tested positive for the presence of SARS-CoV-2, which was an asymptomatic childcare worker, and no secondary cases were detected. Considering that the return to day care activities occurred in a period with high number of cases of deaths and lack of vaccines throughout the country, it is believed that the several preventive measures used by the day care center could be an indication of effectiveness in preventing transmission of SARS-CoV2.

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