



Positivity analysis of Covid-19 tests by Genexpert / xpert SARS-CoV-2

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COVID-19 is an infectious disease caused by the novel coronavirus (SARS-CoV-2) with symptoms such as fever, tiredness, dry cough, nasal congestion, headache, conjunctivitis, sore throat, diarrhea, loss of taste or smell, rash on the skin or discoloration of the fingers or toes and responsible for more than 211,730,035 reported cases and 4,430,697 deaths from the disease. The Genexpert/Xpress SARS-CoV-2 test is a molecular test that aids in the detection of SARS-CoV-2, based on nucleic acid amplification technology that contains primers, probes and internal controls used in qRT-PCR for qualitative detection *in vitro* assay of SARS-CoV-2 RNA in nasopharyngeal or nasal exudate samples obtained by a nasal swab or in samples obtained by nasal wash/aspirate. The aim of this study was to analyze the frequency of positivity of Covid-19 tests by Genexpert/xpert SARS-CoV-2 in different epidemiological periods in the year 2021. A descriptive and retrospective cross-sectional study was carried out. Were provide data from the private laboratory in the city of Santa Cruz of the South. Were included 1162 tests in the study. The following variables were used: year of diagnosis, epidemiological week, CT of gene N2 and gene E. Of the total 1162 tests, 656 (56.6%) were positive. The mean CT of the N2 gene was 27.1 and of the E gene 8.1. Between weeks 12 and 22 there was a greater number of tests performed (645) and 43.4% positive, compared to weeks 25 to 31 (383) performed, 5.7% positive. In summary, the period analyzed 56.6% of the tests were positive, with 43.4% of the positives identified between the epidemiological weeks 12 to 22, a period in which a very small percentage of the population was still vaccinated. The strategies adopted for the control and prevention of COVID-19 are essential to reduce the spread of the disease in the community.

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