Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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study is to assess the effect of treatment strategies on IgG antibodies against SARS-CoV-2 among COVID infected health care workers.

**Methods:** All the post covid HCWs (60-75 days after detection) were categorized into 4 groups on the basis of treatment strategies. 1st group (30) – combination of antiviral and steroid therapy, 2nd group (30) – only steroids, 3rd group (15) – only antivirals, 4th group (15) – only antibiotics (asymptomatic). All the groups were treated with multivitamins and Vitc along with above mentioned therapy. Qualitative IgG ELISA using Merilisa kits was adopted to assess the prevalence of IgG antibodies against SARS-CoV-2 to know the pattern of IgG antibody titres.

**Results:** 90 samples were collected for this study, which were subjected to qualitative ELISA. Out of these highest IgG titres were found in patients only on antibiotics followed by only on antivirals, followed by steroid and antiviral combination and least was found in patients only on steroids.

**Conclusions:** This study showed that administration of steroids results in early weaning of antibodies. Re-infestation could be more in these cases.

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**SEROPREVALENCE OF ANTI SARS COV 2 IgG ANTIBODIES IN HEALTHCARE WORKERS WORKING IN COVID ISOLATION WARDS AT A TERTIARY CARE CENTRE IN HYDERABAD**

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**Background:** Healthcare workers are at a high risk of contracting SARS CoV 2 infection due to their close contact with COVID19 confirmed and suspected cases. Preventing infection amongst healthcare workers is crucial, not only for maintaining a healthy and functional workforce during the pandemic, but also to reduce secondary transmission to colleagues and other patients. Prevalence of IgG antibodies against the infection provides essential information regarding under treated infection and transmission. The present study is being conducted to estimate the seroprevalence of SARS CoV 2 antibodies among healthcare workers working in COVID19 isolation wards.

**Methods:** 90 healthcare workers working in covid isolation wards were recruited into the study. A questionnaire was administered for risk assessment and history of previous RT-PCR confirmed COVID-19 infection, if any. Serum sample collected from the participants were tested for anti SARS CoV 2 IgG antibodies by Indirect ELISA (Covid Kawach IgG Microsia by J Mitra).

**Results:** Out of 48 samples processed so far, 16 (33.3%) samples were positive for SARS CoV 2 IgG antibody of the 16 positive samples, 14 samples were negative by RT-PCR previously. The remaining results will be produced at the time of the presentation.

**Conclusions:** Presence of anti SARS CoV 2 IgG antibodies among healthcare workers at high risk, who tested negative by RT-PCR previously can indicate a previous asymptomatic infection, which calls for further evaluation.

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**PREVALENCE OF ALLERGIC RESPIRATORY DISEASES IN COVID 19 POSITIVE HEALTH CARE WORKERS AT HYDERABAD**

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**Background:** COVID-19 caused by a novel coronavirus (SARS-CoV-2) has emerged as a global pandemic. There is a continuous debate whether to consider allergic respiratory disorders as protective factor or as a risk factor for COVID-19. At the same time severity of COVID 19 is found to be more if patient’s level of disease control is poor according to some studies. Hence there is a need to find the prevalence of allergic respiratory diseases among COVID 19 positive cases. HCW are taken as the study population as they have equal COVID exposure risk and also good level of disease control. AIM: To find the prevalence of allergic respiratory diseases among COVID positive HCW.

**Methods:** Nasopharyngeal samples of HCW collected from May 15 to November 15 2020 were subjected to RT PCR for detection of SARS COV-2 RNA and the positive cases were noted for history of allergic respiratory disorders like chronic rhinosinusitis, asthma from the clinical information provided while sample collection.

**Results:** Out of total 912 Health Care Workers tested for COVID 19 in first 5 months by RT PCR 121 were COVID positive, among them 24(19.8%) have known history of allergic respiratory diseases of which 4(3.3%) were known for Chronic Rhinosinusitis, 15(12.3%) were asthmatic, 5(4.13%) have both CRS and asthma, further results will be provided at the time of presentation.

**Conclusions:** Prevalence of allergic respiratory diseases helps in finding out if it’s a risk factor or not and also if any pro-tective role against COVID 19 to help in further studies.

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**COVID-19 TESTING LABORATORY: ESTABLISHMENT AND OPERATION AIMING TOPMOST BIOSAFETY, QUALITY STANDARDS AND TIMELINESS AT DR. DY PATIL MEDICAL COLLEGE, PIMPRI, PUNE.**

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**Background:** Pandemic situation of SARS-CoV-2 has made every country to gear up quickly for the prevention, control and testing. Accordingly, India has developed the guidelines and policies and requested all medical colleges to establish the COVID-19 testing facility under the mentorship of ICMR and NABL.

**Methods:** As we, at our college already having the central research facility, the urgent national need has made us easy to create a testing facility for the COVID-19. As per NABL guidelines to have the requirements, we have worked together with wholehearted support and active participation from Human Resource Department, Central Purchase Department, Dean Office and honourable management excellence. All the requirements like physical lab setup, necessary equipment-ment with calibration and validation, dedicated biosafety cabinets, PPEs, biomedical waste management, UPS system, SOPs, quality consumables, trained manpower, entry protocol, working protocol, exit protocol, report system made functional systematically. Accordingly, data generated and communicated to AIIMS, Nagpur and NABL, subseqently auditing by NABL was conducted thoroughly and thoroughly.

**Results:** Without NC we got the NABL Accreditation. On the basis of recommendations of AIIMS, Nagpur and NABL Accreditation, the ICMR has provided the login to us. Afterwards the lab started receiving the samples for COVID-19 testing. With minimum samples we started testing and reporting to ICMR, PCMC and State Govt. following all the biosafety measures and necessary guidelines and compliances. Due to heavy load of samples in our state, authorities have requested to increase the testing capacity, so we have geared up accordingly by improving biosafety by using powered air-purifying respirator (PAPR), additional biosafety cabinets type II B2, weekly decontamination / fumigation of lab and necessary logistics and trained staff. Till now we have tested more than 6000 samples providing the results / reports within 24 hrs. We achieved 100% concordance for external quality control.

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**COVID 19 CO-INFECTION WITH HIV AND HEPATITIS C**

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**Background:** The COVID-19 has been a severe pandemic all around the world. During this pandemic, very few cases of SARS-CoV-2 co-infected with HIV and Hepatitis C are reported. According to the limited literature available, HIV patients co-infected with COVID-19 have a high mortality rate and poor clinical outcomes, but we report special cases of SARS-CoV-2/HIV and SARS-CoV2/ Hepatitis C, both cases were already on antivirals and had good clinical outcome.

**Methods:** CASE 1: 58 year old male, known case of HIV diagnosed two years ago with normal CD4 + T cell count. Present- ed with chief complaints of cough and shortness of breath. On examination had respiratory rate of 28/min and spo2 89

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% on room air and was hemodynamically stable. CASE 2: 50 year old male, known case of Hepatitis C diagnosed one year ago presented with chief complaints of cough and shortness of breath. On examination had respiratory rate of 26/ min and sp02 91 % on room air and was hemodynamically stable. His liver function tests were mildly deranged. Sus-pecting COVID 19 pneumonia in both the cases, samples were sent and both patients were found to be SARS-CoV-2 positive using real-time Polymerase Chain Reaction (RT-PCR). Both patients were already on antivirals, at the time of admission. There was no co-morbidity in both the cases and X-ray showed bilateral pneumonitis, typical of COVID 19 and CT scan showed ground glass opacities bilaterally in basal areas. Routine investigations for COVID 19 were sent and were started on i/v Remdesivir, ster- roids and routine treatment was given.

Results: Present study supports that SARS-CoV-2/HIV and SARS-CoV-2/Hepa- titis C co-infected patients have a favorable prognosis and less severe clinical presentation of COVID 19 when already under treatment with anti-viral therapies.

Conclusions: Same as results

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A STUDY ON HYDROXYCHLOROQUINE (HCQ) AS PROPHYLAXIS AMONG HEALTH CARE WORKER (HCW) FOR SARS-COV-2 V-2 INFECTION

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Background: The present world is experiencing COVID-19 pandemic caused by severe acute respiratory syndrome coro- navirus (SARS-CoV-2), which has been confirmed in nearly 5.6 crores cases and 13.4 lakhs deaths worldwide. The major- ty of COVID-19 infections are asymptomatic or mild symptomatic, however a considerable part of infected persons re- quires hospitalization. As there is no definitive treatment, prevention and control of infection is the key to fight against this infection. In India a significant proportion of healthcare workers (HCWs) are getting affected and on March2020, ICMR recommended the use of Hydroxychloroquine (HCQ) as prophylaxis for SARS-CoV-2 infection. Some observational studies support the anti-viral activity of HCQ but still there is no extensive work on HCWs that evaluates the prophylactic ty of HCQ against SARS-CoV-2 infection. This study evaluated the potential role of HCQ as prophylactic drug among COVID-19 affected and non-affected individuals.

Methods: We have conducted a cross-sectional study in a tertiary care hospital, Kolkata from July 2020 to Novem- ber2020 where 199 HCWs were interviewed using structured questionnaire related to HCQ intake, dose and duration, side effects, signs and symptoms, COVID 19 test report, duration of illness etc.

Results: Among 199 HCW, 90(45.22%) HCW took HCQ prophylaxis and among them 62% were the COVID19 negative which also reflects its prophylactic effi- cacy. We have also evaluated the role of HCQ for various clinical symptoms and found around 34% HCQ non exposed COVID positive individuals encountered shortness of breath whereas only 14% HCQ exposed COVID positive patients encountered the same. In case of chest HRCT scan data, the study found significant lung involvement for HCQ non exposed individuals whereas the other group rarely developed any involvements.

Conclusions: There is statistically significant protective role of HCQ for COVID-19 (OR=0.51724, 95% CI=0.292-0.914, p-value=0.023). Further study with more clinical and preclinical data will help to explore the potential prophylactic role of HCQ.

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A COMPARATIVE STUDY OF RT-PCR AND TRUENAT BETA-COV TEST IN A TERTIARY CARE HOSPITAL

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Background: A novel corona virus known as Severe Acute Respiratory Syndrome Corona Virus2 (SARS -nCoV2 or COVID19) was first reported in Wuhan city of China. The spectrum of clinical presentation of COVID-19 is highly variable, infections range from being asymptomatic to severe viral pneumonia with res- piratory failure leading to death. There is a need for testing individuals for infection for early detection and treatment to prevent the spread of pathogen which can be achieved by polymerase chain reaction based tests like RT-PCR and Truenat. These work by detecting the presence of genetic targets from a specific pathogen. This study is to know the accuracy of COVID-19 testing by comparing the Truenat beta CoV test results with RT-PCR results in healthcare individuals in a tertiary care hospital.

Methods: The study was conducted in Microbiology department, Kurnool Medical College, Kurnool from 18th april 2020 to 18th June 2020. Nasopharyngeal swabs in VTM’S collected from healthcare individuals were sent to Truenat lab [Molbio Truenat Beta CoV Test; A Chip-based real time PCR]. Then positive samples of Truenat sent to RT-PCR(Giagen) for confirmation. In both, RNA extraction was done from samples and specific target genes were identified by using principle of polymerase chain reaction.

Results: Among 8000 samples tested, Truenat detected 3300 COVID positive samples with sensitivity of 82.6% and speci- ficity of 96.7% compared to that of RT-PCR which is gold standard.

Conclusions: Molbio Truenat Beta CoV Virus Testing Kits were approved for COVID-19 testing by ICMR during the epi- demic April 2020 which is econom- ical, portable, doesn’t require processing of samples in Biosafety cabinet 2, doesn’t re- quire expertise. Its sensitivity and specificity are 82.6% and 96.7% compared to that of RT-PCR can be used as a point-care of testing, as a screening test followed by confirmation with RT-PCR which is gold standard

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RT PCR POSITIVITY OF COVID -19 PATIENTS & ITS TEMPORAL RELATION TO TIME.

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Background: COVID-19 being an airborne High Consequence Infectious Disease (HCID) warrants early detection to con- tain spread especially in a pandemic that has gripped the world by storm. RT-PCR (Real time polymerase chain reaction) is considered the gold standard confirmatory test for COVID-19. The assay is based on detection of viral RNA and genes located in different regions of SARS-CoV-2 genome with a potent detection limit of >=10 genomic copies per reaction. Average duration of RT-PCR result becoming negative from positive gives an idea as to how long a patient needs quarantine and also a perception of clinical recovery.

Methods: This study includes 1766 positive patients tested at JLN Medical College Ajmer, Rajasthan, out of the total pa- tient who underwent RT-PCR testing from 26-08-2020 to 17-11-2020. The samples were collected through oro- naso- pharyngeal swabs. Automated RNA extraction was done using Thermo- fisher and Perkin Elmer machines and RT-PCR was done on Bio-Rad Machines.

Results: Out of 1766 samples, 61 samples in the age group of 0-14 years (children and young adolescents) showed an average duration of 10.5 days and range of 3- 18 days to be reported negative, 1537 in the age group of 15-65 years (working age population) had an average duration of 11.3 days and range 1-32 days, 168 for >=66 years (elderly popula- tion) had an average duration of 10.7 days and range of 1-23 days. When gender is compared, 505 were females with average illness duration of 10.7 days and range 1-32 days and 1261 were males with average duration of 11.2 days and range 1-31 days.

Conclusions: Once tested positive there is a very subtle difference in duration of being reported negative between the various age groups and gender with children and young adolescents getting an earlier negative result than others and females earlier than the male population.

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COMPARATIVE ANALYSIS OF RESULTS OF RT-PCR AND TRUENAT IN DIAGNOSIS OF COVID 19

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