

HCFI Dr KK Aggarwal Research Fund

Minutes of an International Weekly Meeting on COVID-19 Held by the HCFI Dr KK Aggarwal Research Fund

Topic: COVID protocols followed by various countries

8th January, 2022 (Saturday, 9.30 am-11 am)

- **Singapore:** There were 2,522 Omicron cases in the country as of 6th January, 2022. This is because the country is opening up through VTL (vaccine travel lanes) with several countries, including Europe. Out of these, only three required oxygen and no patient was in intensive care unit (ICU), compared to Delta, where 30 would require oxygen, be in ICU or died. The vaccination differentiated safe management measures (VDS) is starting from 14th February, 2022. If somebody has not taken the booster, then he/she is given 5 to 9 months after the second dose to take the booster. Health protocols have been defined for three groups: unwell, well but test positive and identified by the Ministry of Health (MoH) as close contact of an infected person. If well but test positive, self-isolate at home. Repeat rapid antigen test (RAT) after 3 days; if negative, then self-isolation can be discontinued. If unwell, get tested and if positive self-isolate at home for 10 days if vaccinated and 14 days if unvaccinated or partially vaccinated. A close contact of an infected person is required to take RAT and upload results on the website. Repeat RAT and go out only if negative. If negative after 7 days then no further test needed. Around 11% of children aged 5 to 11 years have taken their first dose of coronavirus disease 2019 (COVID-19) vaccine. The Pfizer vaccine has been authorized for use in this age group. For those who have taken Sinopharm and Sinovac vaccines, three doses of the same are considered as the primary complete vaccine course in Singapore.
- **Malaysia:** Omicron is in the country, but the cases are not as rampant as the Delta variant. Yesterday, there were 3,381 new cases. Out of these, 98.9% were category 1 cases and 1.1% were in categories 3 to 5. Saliva test kit is now available, the price of which is regulated by the government. If positive, then to be confirmed with RAT/RT-PCR (reverse transcription polymerase chain reaction). Category 1 to 3 patients can remain at home and if negative, then they can go out. There are standard operating procedures (SOPs) like face masks, hand wash, social distancing and the government is encouraging people to follow these SOPs. The vaccination program is going on and there is a lot of hesitancy about booster. People are apprehensive about mix and match of vaccines. All children aged 12 to 17 are all vaccinated with 2 doses, but vaccination for the 5- to 11-year age group is not started yet.
- **Pakistan:** The country is in the fifth wave. Self-care is priority. After exposure to COVID-19, it is advised to get RT-PCR done as no home test kits are available. If positive, they are advised to stay at home and self-isolate and follow SOPs like masks and handwashing. Repeat test after 3 days, if negative then come out of the isolation. In the hospitals, treatment protocols are in place. The telehealth system is working very effectively in Sind province. Positive cases are monitored by telehealth. A total of 73 million (32%) people have had both vaccine doses and 99 million have taken the first dose. Booster dose has been authorized for ≥ 30 years. Pfizer vaccine is used as booster. Children older than 12 years are being offered vaccination in their schools, but parents are hesitant. Cases are increasing. In the last 24 hours, there were 1,292 new cases, 6 deaths, 1.2 million have recovered. People are not following SOPs. The spread of Omicron is slow. There are 372 omicron cases. The NCOC (National Command Operation Center) meets every 2 weeks.
- **USA:** There is a rapid surge in cases across the country. The Pfizer vaccine is approved for booster in children aged 12 to 15 years. Flurona has been reported. Total cases are 59,846,235, of which 9,00,000 are new cases today; 2,645 deaths, over 3 million tests and 5,000 were hospitalized and 409 were in ICU. This week, the Centers for Disease Control and Prevention (CDC) reduced the isolation time from 10 days to 5 days. There is shortage of home test kits. Isolation has been reduced to 5 days after a positive COVID test. Testing has not been included in the CDC recommendations on return to work/school. There is an increase in pediatric cases and hospitalizations. For the week ending December 30, more than 3,25,000 pediatric cases

were reported, indicating a 64% increase over the 1,99,000 cases reported in the week ending December 23. Pfizer vaccine has been approved as booster for 12 to 15 years. Sotrovimab has been found to be effective in treating the Omicron variant. Paxlovid and molnupiravir are to be used in the outpatient setting only. Cases of Flurona (concurrent influenza infection and severe acute respiratory syndrome coronavirus 2 [SARS-CoV-2]) have been reported.

- **Australia:** There were no cases in Western Australia, but cases were rapidly increasing in the states of Victoria and New South Wales (NSW). A major problem is the impact on the work force. The supply chain is affected. The gap for the booster has been reduced to 4 months from the last (second) dose and from the end of this month, a 3-month gap will be required. Vaccination for children aged 5 years will start from Monday. Pfizer and Moderna vaccines are given as booster. Because of inadequate supply of RT-PCR, RATs have now been opened up. If a person tests positive on RAT, then start isolation and mandatory reporting of RATs is required. Restrictions are coming back and masks are mandatory except in Western Australia. Cases in NSW are expected to peak in first week of February.
- **Japan:** The country is in the midst of the sixth wave. Okinawa US base is the epicentre; 2,000 out of 1,00,000 tested positive in last 7 days. There are no deaths and no patient in ICU/ventilator. About 80% have received two vaccine doses. Booster for medical staff and elderly has started. For symptomatic, 10 days quarantine; close contacts for 14 days quarantine. There is a mild lockdown in some cities.
- **South Africa:** There are no restrictions on movement from 31st of December. Wearing a mask is compulsory. There is emphasis on social distancing, handwashing and avoiding crowds. Children more than 12 years are being vaccinated. We saw a very fast spread of the infection. The numbers came down as fast as they went up. Omicron is a mild disease. No differentiation between vaccinated and unvaccinated cases in mild disease, but difference is seen in hospital cases, where the majority are unvaccinated. The number of patients ventilated (304) has remained constant over the last few days. Patients on oxygen 1,300; new cases in the last 24 hours 9,260, deaths 140, positivity rate was 20.2%; 361 admissions in the

last 24 hours. The unvaccinated and 50+ patients are likely to have severe disease. Treatment protocol includes dexamethasone for patients requiring oxygen supplementation or mechanical ventilation; heparin prophylaxis is given. However, chloroquine, hydroxychloroquine, ritonavir + lopinavir, colchicine, azithromycin and nonsteroidal anti-inflammatory drugs (NSAIDs) are not recommended for COVID management. No contact tracing is done now. Isolation has been shortened. Lockdown has been lifted. Omicron is still treated as a mild disease.

- **Philippines:** Last week there were less than 400 cases per day. But starting January, there is a surge in cases due to Omicron. Yesterday, there were 21,819 new cases and 129 deaths, and 77,369 active cases. Total number of cases was 2.9 million and total deaths were 51,871 in number. From January 3, the alert level has been increased from Level 2 to Level 3 until the end of January. Under the new quarantine guidelines issued by the Dept. of Health, fully vaccinated persons must quarantine themselves after exposure for 7 days, while the unvaccinated persons must quarantine for 14 days. For confirmed cases, mild-to-moderate patients must isolate for 10 days from the time of onset of symptoms. Asymptomatic persons must isolate for 10 days from the time of testing. Cases are increasing in children. The vaccination for 5- to 11-year age group will commence in February. So far, 51 million people have been vaccinated, the target is 70 to 80 million.
- **India:** The third wave is now here. In the last week of December, there were around 8,000 cases, but within a week, the numbers have spiralled and now there are up to 1.4 lakh daily new cases. The total number of Omicron cases as of today is around 4,000 and 2 deaths have been reported. So far, Omicron is characterized as a mild disease. About 94% people have taken the first dose, while 64% are fully vaccinated with two doses. Children aged 15 to 18 years are now eligible for vaccination with Covaxin. From 15th, booster dose will be available to healthcare workers and the elderly and those with comorbidities. The same vaccine as the primary vaccine will be given as booster. There is no mix and match of vaccines. The test positivity is 7.6%. Hospital admissions have reduced from 10% to 8%, while ICU admission rate is 0.8% of all admissions. The number of cases is increasing, but mortality and severity are not increasing. Night

restrictions and weekend curfew are in place in some cities. The number of persons in indoor gathering is limited to <100. Seven-day quarantine with RAT is required for international travelers. Category A (mild) patients can self-isolate at home. But if symptoms increase then they are required to report to dedicated hospitals. Category B patients include patients more than 65 years old even with mild symptoms and those with comorbidities. Category C patients are those with severe symptoms. The first-line of management is monoclonal antibodies cocktail given as day care. Molnupiravir has been granted emergency use authorization (EUA), but is not available yet.

(Information as on the day of meeting)

Participants – Member National Medical Associations:

Dr Yeh Woei Chong, Singapore, Chair-CMAAO; Dr Marthanda Pillai, India Member-World Medical Council, Advisor-CMAAO; Dr Wasiq Qazi, Pakistan, President-elect-CMAAO; Dr Ravi Naidu, Malaysia; Dr Angelique Coetzee, South Africa; Dr Akhtar Hussain, South Africa; Dr Benito Atienza, Philippines; Dr Salma Kundi, Pakistan; Dr Qaiser Sajjad, Pakistan; Dr Md Jamaluddin Chowdhury, Bangladesh; Dr Marie Uzawa Urabe, Japan

Invitees: Dr Russell D'Souza, Australia UNESCO Chair in Bioethics; Dr Monica Vasudev, USA; Dr Mulazim Hussain Bukhari, Pakistan; Dr Anita Dhar, India; Dr Arun Jamkar, India; Dr S Sharma, Editor-IJCP Group

Moderator: Mr Saurabh Aggarwal

Coronavirus Updates

Post-COVID executive dysfunction in young

Persons with history of previous COVID-19 infection reported more cognitive dysfunction, particularly executive dysfunction, compared to persons who did not have the infection, according to a new medRxiv study of 1958 young and middle-aged adults. Compared to persons with asymptomatic infection, those who had moderate and very/extremely severe disease experienced greater dysfunction. This effect was stronger for men than for women, and for younger compared to older adults. Researchers used four "self-restraint" subscale items from the Deficits in Executive Functioning Scale, short form (BDEFS-SF) to assess executive dysfunction(Source: medRxiv)

Atypical manifestations of COVID-19

Researchers have reported the case of a 34-year-old man who presented with a new onset of hallucination and a

5-day history of anxiety. The patient had no past history of any medical condition or any complaints of headache, visual changes, seizures or body weakness. He was a nonsmoker and did not consume alcohol/drugs. He was tested for COVID-19 with nasopharyngeal RT-PCR in the ED due to a history of contact with sick patients in his family, which was positive. This case report highlights the need that physicians should be aware about atypical manifestations of COVID-19. Any new symptom must be carefully considered, keeping in view the local epidemiology... (Source: *Case Reports in Psychiatry*. 2021 Dec 30.)

CoronaVac two doses + Pfizer booster less effective against Omicron

A preprint study conducted in vaccinated volunteers from Dominican Republic suggests that two doses of the inactivated CoronaVac COVID-19 vaccine followed by Pfizer booster generated comparable antibody response against ancestral virus and Delta variant to that seen after two doses of mRNA vaccines, while the neutralization titers against Omicron were significantly lower. Antibody levels against Omicron declined 6.3-times when compared with the ancestral variant and 2.7-times when compared with the Delta variant. None of the participants who had taken just the two doses of CoronaVac showed neutralizing antibodies against Omicron...(Source: medRxiv, Dec. 29, 2021)

WHO recommends two new drugs for COVID-19

The WHO has added two new drugs in the treatment armamentarium of COVID-19, baricitinib and sotrovimab, in its eighth update of WHO's living guidelines on therapeutics and COVID-19. Baricitinib, a Janus kinase (JAK) inhibitor, is strongly recommended for patients with severe disease or those who are critically ill with COVID-19. It is recommended to be given with corticosteroids. The second drug, sotrovimab, is a monoclonal antibody indicated for mild or moderate COVID-19 patients at high risk of hospitalization, such as patients who are older, immunocompromised or with comorbid conditions, such as diabetes, hypertension and obesity and those who have not taken the vaccine... (Source: WHO, Jan. 14, 2022)

Some US states are allowing asymptomatic and mildly infected healthcare workers to continue working

The surge in Omicron cases has overwhelmed hospitals and resources in the US. Many hospitals are facing severe shortage of hospital staff as many of them are now infected with SARS-CoV-2. Taking this into consideration, states like California, Arizona, Rhode

Island are permitting those hospital staff, infected with coronavirus, to continue working if they are either asymptomatic or have mild symptoms. Last month, in its guidance for healthcare workers, the CDC had said that "Healthcare workers with COVID-19 who are asymptomatic can return to work after 7 days with a negative test, and that isolation time can be cut further if there are staffing shortage"... (Source: *Medscape*, January 11, 2022)

Immune escape of Omicron variant

A *Nature* study has demonstrated considerable escape of SARS-CoV-2 Omicron to neutralization by antibodies. The sensitivity of the Omicron virus was tested against nine monoclonal antibodies (mAbs) and antibodies present in 115 sera from either convalescent patients or those who had been vaccinated from the Orleans Cohort. Omicron was found to be completely or at least partially resistant to neutralization by all monoclonal antibodies tested in this study as well as vaccine-induced antibodies. However, Omicron was susceptible to the booster dose of Pfizer vaccine, though with 6- to 23-fold lower titers against Omicron compared to against Delta... (Source: *Nature*, Dec. 23, 2021)

Last ICU bed should be given to patient with best chances of survival, reveals survey

Results of a new survey conducted between 28th August and 4th September, 2020, reported in the *Emergency Medicine Journal* show that the respondents were in favor of giving the last available ICU bed to the patient who had the highest odds of surviving COVID-19. Age of the patient did not influence the decision of the people surveyed. Younger respondents (under 30 years of age) were more likely to choose young and old patients, and were less likely to select patients aged 40 to 60 years old. Conversely, as the age of the patient declined, the preference for saving the patient showed a modest decline for respondents aged 30 to 49 years... (Source: *Emergency Medicine Journal*, Jan. 3, 2022)

Need to update COVID-19 vaccines, says WHO Technical Advisory Group

The Technical Advisory Group on COVID-19 Vaccine Composition (TAG-CO-VAC), a WHO Technical Group, has said that "the composition of current COVID-19 vaccines may need to be updated, to ensure that COVID-19 vaccines continue to provide WHO-recommended levels of protection against infection and disease by VOCs, including Omicron and future

variants". According to the expert group, vaccines that not only protect against severe disease but also prevent infection are needed. The vaccine could be a multivalent vaccine or monovalent vaccine against the predominantly circulating variant... (Source: *WHO*, Jan. 11, 2022)

Myocardial inflammation in patients recovered from mild COVID-19

A recent study reports that some patients recently recovered from COVID-19 can have myocardial inflammation, which can present without any cardiac symptoms. In this single-center study, 8 out of the 47 patients enrolled, showed focal fluorodeoxyglucose (FDG) uptake on positron emission tomography (PET) consistent with myocardial inflammation. They also had high levels of inflammatory blood markers including interleukin 6, interleukin 8 and high-sensitivity C-reactive protein (hsCRP). These findings were seen to improve on follow-up... (Source: *JAMA Cardiology*, Jan. 12, 2022)

Physician burnout increased during COVID, reveals Medscape survey

The COVID-19 pandemic has augmented the problem of physician burnout. According to the Medscape's National Burnout and Depression Report 2022, 47% physicians reported feeling burnout compared to 42% last year. The survey included more than 13,000 physicians from 29 specialties. Expectedly, emergency physicians topped the list at 60% followed by critical care specialists at 56%, ob/gyn at 53% and infectious disease and family medicine at 51% each. Women physicians reported more burnout than men physicians (56% vs. 41%)... (Source: *Medscape*, Jan. 21, 2022)

Genetic factor associated with loss of smell and taste in COVID patients

A new study published in *Nature Genetics* has suggested that the loss of smell and taste during COVID-19 may be due to a genetic risk factor. Results of a multi-ancestry genome-wide association study show that a locus near the UGT2A1 and UGT2A2 genes, expressed in the olfactory epithelium, is associated with the loss of smell and taste. Presence of this genetic risk factor increases the chances of loss of smell and taste after COVID infection by 11%. This symptom was more commonly reported by women than men (72% vs. 61%) and more than 70% of patients having this symptom were aged 26 to 35 years ... (Source: *Nature Genetics*, Jan. 17, 2022)

With inputs from Dr Monica Vasudev