

23rd May 2020

"Do not test the depth of the river with both feet."

Chloroquine for COVID-19: Is It safe?

Chloroquine or hydroxychloroquine, alone or in combination with azithromycin, are widely used for COVID-19 treatment despite no firm evidence of therapeutic benefit.

A large observational study of 96,032 hospitalized patients on six continents (mean age 53.6 years; 46.3% women) reports a significant increase in risk of in-hospital mortality (hazard ratios of 1.34 [95% CI: 1.22-1.46] to 1.45 [95% CI: 1.37-1.53] for patients treated with these drugs. Incidence of ventricular arrhythmias was 4.3%-8.1% compared with 0.3% in the control group (p<0.001).

This study found that chloroquine or hydroxychloroquine with or without azithromycin are not useful for treating COVID-19 and could be harmful.

Ref: Mehra M, The Lancet, May 22, 2020

24th May 2020

"Knowledge without wisdom is like water in the sand" - Guinean proverb

COVID-19 and Vaccine Hesitancy

Vaccine hesitancy is delay in acceptance or refusal of vaccination despite availability of vaccination services (WHO 2015).

A French online survey (n=1,012) found that 26% of respondents would not use a COVID-19 vaccine if it became available. Those most likely to hesitate were low income persons (37%), young women 18-35 years (36%), and the elderly >75 years (22%).

Vaccine hesitancy correlated with political beliefs and was more likely among far left or far right voters or those who abstained from voting.

COCONE Group, The Lancet Infectious Diseases, May 20, 2020

25th May 2020

"A wise person is the one who listens to advice" - Kenyan proverb

SARS-CoV-2: A Super Spreading Event

'Large gatherings pose a risk for SARS-CoV-2 transmission'.

'Among 92 attendees at a rural Arkansas church during March 6–11, 35 (38%) developed laboratory-confirmed COVID-19, and three persons died. Highest attack rates were in persons aged 19–64 years (59%) and ≥65 years (50%). An additional 26 cases linked to the church occurred in the community, including one death'.

'High transmission rates of SARS-CoV-2 have been reported from hospitals, long-term care facilities, family gatherings, a choir practice, and church events'. As lockdowns are eased, care should be taken to prevent transmission in group gatherings.

MMWR Morb Mortal Wkly Rep 2020; 69:632–635

26th May 2020

“The goat thought it was dirtying its owner's wall until it realized that its skin was peeling off” -
Ghanaian Proverb

Men and women are equally likely to acquire COVID-19, but men have higher risk of severe illness and death, independent of age (Front Public Health. 2020 Apr 29; 8:152).

SARS-CoV-2 uses the angiotensin-converting enzyme 2 (ACE2) receptor to enter healthy cells. Men have higher ACE2 concentrations in their blood than women, which may partly explain their higher burden of illness (Eur Heart J. 2020 May 14;41(19):1810-1817).

Men are culturally conditioned to perceive illness as weakness (boys don't cry; take it like a man), engage in risky behaviour, delay seeking healthcare, and have pre-existing heart, liver and chronic lung disease which are associated with negative COVID-19 outcomes. Women have two X-chromosomes; the X-chromosome carries immune-related genes and confers an immunological advantage to women (Hum Genomics. 2019 Jan 8;13(1):2).

27th May 2020

“It is not only the hare; the tortoise also arrives at the destination” - Nigerian Proverb

Results from First Published COVID-19 Vaccine Study

A phase 1 clinical trial of a recombinant adenovirus type-5 (Ad5)-vectored COVID-19 vaccine evaluated safety, tolerability and immunogenicity among 108 healthy adults aged 18-60 years in Wuhan, China. ELISA antibodies and neutralizing antibodies increased significantly at day 14 and peaked at day 28. Specific T-cell responses peaked at day 14.

This study found that pre-existing Ad5 immunity could slow down rapid immune responses to SARS-CoV-2, lower the peak of humoral immune responses and diminish persistence of vaccine-elicited immune responses. Final results will be evaluated in six months.

An ongoing Phase II trial in China will provide additional information on the safety and immunogenicity of the Ad5 vectored COVID-19 vaccine.

Zhu FC, The Lancet. 2020 May 22

28th May 2020

"Don't think there are no crocodiles just because the water is calm" - Malawian Proverb

COVID-19: Is It Safe for Me to Go to Work?

The WHO estimates that 1,920 health care workers (HCW) in 32 African countries have tested positive for SARS-CoV-2. The CDC reports that 11% of SARS-CoV-2 infections in the USA are among HCW.

HCW at high risk of contracting SARS-CoV-2 because of older age or chronic conditions should be counselled about occupational risk. The graphic below classifies the risk of SARS-CoV-2 infection as high, medium, or low.

Persons in group C should consider working from home or stopping work. Those in group B should discuss risk with their clinician. Group A should wear masks outside the home, observe hand hygiene and use PPE.

Larochelle MR, N Engl J Med. 2020 May 26; MMWR Morb Mortal Wkly Rep 2020;69:477-481

29th May 2020

"Into a closed mouth, no fly will enter" - Moroccan Proverb

COVID-19: Airborne Transmission Increases with Crowding

An aerodynamic analysis of two Wuhan hospitals found that levels of airborne SARS-CoV-2 RNA were undetectable in the majority of public areas except in two areas prone to crowding (Nature. 2020 Apr 27).

The majority of COVID-19 cases in a South Korean call center occurred in individuals working in close proximity, suggesting droplet transmission occurred through close contact with infected persons (Emerg Infect Dis. 2020 Apr 23;26(8)).

These data underscore the importance of wearing masks, physical distancing (avoiding crowding) and adequate ventilation in preventing airborne transmission of SARS-CoV-2.
