Advanced Primary Care Newsletter on myths of COVID-19 – August 26, 2020



It has been almost 5 1/2 months since the World Health Organization declared COVID-19 a pandemic. As of August 22, 2020, globally there have been 22,812,491 confirmed cases with 795,132 deaths from COVID-19.

In Canada, to date we have had 123,873 confirmed cases with 9054 deaths. The United

States (5.5 M), Brazil (3.5M) and India (2.9M) are the top 3 countries with the highest number of confirmed COVID-19 cases.

While we are waiting for an effective vaccine, there has been lots of myths about COVID-19, such as possible effective treatment, post exposure prophylaxis and prevention. In this newsletter we will address some of these common myths.

1. "Dietary supplements with Vitamin C and D are effective in the treatment and prevention of COVID-19"

In all circumstances, it is reasonable to recommend a **diet rich** in antioxidant nutrients. Vitamin C and D play a well-proven role in the immune system. However, it is **not known** whether a **supplemental dose** of these vitamins administered to individuals without a specific deficiency would result in added benefit.

Specific clinical studies are underway on the intra-venous administration of vitamin C in hospitalized COVID-19 patients. Vitamin D deficiency has been associated with increased susceptibility to respiratory infections, therefore it is reasonable, even in the absence of specific data, to administer **standard recommended doses of vitamin D to healthy individuals and COVID-19 patients**.

It is important that we have strong clinical research data to support any claim. Otherwise, we risk the emergence of gurus or other well-meaning experts aiming at speculating on the appeal of these interventions for laypersons.

Reference:

Fabio Infusino et al: Diet Supplementation, Probiotics, and Nutraceuticals in SARS-CoV-2 Infection: A Scoping Review, Nutrients 2020, 12(6), 1718

2. "Hydroxychloroquine or chloroquine with or without Azithromycin is effective in treatment for mild/ moderate COVID -19 infection as well as for post exposure prophylaxis"

Studies showed Hydroxychloroquine alone or combine with Azithromycin **did not improve** clinical status at 15 days for patient with mild/moderate COVID 19 as compared to standard care.

A study has shown Hydroxychloroquine when used as postexposure prophylaxis within 4 days after high-risk or moderate- risk exposure to COVID-19 exposure, **did not prevent** illness compatible with COVID-19 or confirmed infection.

Hydroxychloroquine or Chloroquine is accepted as generally safe for patients with Malaria and autoimmune disease, but its use where not indicated and without medical supervision can cause serious side effects and should be avoided. The combination of Hydroxychloroquine and Azithromycin can cause serious cardiac arrhythmias.

Reference:

D.R Boulware et al: A Randomized Trial of Hydroxychloroquine as Postexposure Prophylaxis for Covid-19 NEJM 2020;383:517-25

Geleris J et al: Observational study of Hydroxychloroquine in hospitalized patients with COVID-19. NEJM 2020;382;2411-8 Alexandre B Cavalcanti et al: Hydroxychloroquine with or without Azithromycin in Mild-to-Moderate COVID-19. NEJM 2020

3. "Wearing a mask outside health care facilities offers little, if any, protection from infection"



It is apparent that many people with SARS-CoV-2 infection are asymptomatic or pre symptomatic yet highly contagious and that these people account for a substantial portion of all transmissions. Universal masking helps to prevent such people from spreading virus-laden secretions, whether they recognize that they are infected or not.

A growing body of research shows that the risk of SARS-CoV-2 transmission is strongly correlated with the duration and intensity of contact: the risk of transmission among household members can be as high as 40%, whereas the risk of transmission from less intense and less sustained encounters is below 5%. Recent research associating mask wearing is correlated with less transmission of SARS-CoV-2, particularly in closed settings.

A report during the pandemic showed that a group of Missouri hairstylists who were infected with COVID-19 did not infect any of their 140 clients, presumably because of the salon's universal masking policy.

A CDC report detailed this case, concluding: "consistent and correct use of face coverings, when appropriate, is an important tool for minimizing spread of SARS-CoV-2 from presymptomatic, asymptomatic, and symptomatic persons."

Please click the link below to see a quick video on how effective face coverings can be in restricting droplet spreading.

https://www.youtube.com/watch?v=dbAzUUtqbiU

4. "COVID-19 only affects individuals who are 65 and over, especially those who have pre-existing medical conditions"

COVID-19 affects all age groups, with the highest proportion of cases occurring in individuals age 40-59 years old. Most reported pre-existing health conditions amongst cases were respiratory, cardiac disease and diabetes.



Reference:

Public Health Agency of Canada. Epidemiological Summary of COVID-19 cases in Canada. Retrieved from August 12, 2020

https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/epidemiological-summary-covid-19-cases.html

5. "I have been exposed to someone who was tested positive for COVID 19, I do not need to quarantine myself as my COVID 19 test came back negative"

You should still self-quarantine for 14 days since your last exposure. It can take up to 14 days after exposure to the virus for a person to develop COVID-19 symptoms. A negative result before end of the 14-day quarantine period does not rule out possible infection. By self-quarantining for 14 days, you lower the chance of possibly exposing others to COVID-19.

Dr. Mary Szabo MD FCFP(EM) Clinical Associate Professor U. of Calgary Advanced Primary Care Team

