# ASIA-PACIFIC JOURNAL OF PUBLIC HEALTH

## Editor's Blog



### Getting tired of COVID-19 restrictions? It really works. New evidence

#### Colin Binns, MBBS, PhD

School of Public Health, Curtin University, Perth, Western Australia, Australia

Prof Colin Binns is the Editor-in-Chief of Asia-Pacific Journal of Public Health (APJPH)

Email: <u>c.binns@curtin.edu.au</u>

#### Wah Yun Low, PhD

Faculty of Medicine , University of Malaya Kuala Lumpur, Malaysia

Asia-Europe Institute, University of Malaya, Kuala Lumpur, Malaysia

Prof Wah Yun Low is the Managing Editor of APJPH and also the President of APACPH Email: <u>lowwy@um.edu.my</u>

#### Victor Hoe Chee Wai, MBBS, PhD

Faculty of Medicine, University of Malaya Kuala Lumpur, Malaysia

Email: victor@um.edu.my

The classic public health response to an epidemic of a highly infectious disease that we teach in our Schools of Public Health is to:

- Develop a Case Definition. Since COVID19 symptoms overlap with other viral infections, eg Upper respiratory tract infection, influenza. While 'clinical suspicion' is useful, it must be diagnosed on 'and viral testing (PCR nasal swab).
- Isolate all cases (admit to hospital if needed or symptomatic)
- Tracing of all of contacts. Quarantine of contacts. Confine in home, hotels
- Lockdown of the population. Levels vary from country to country and state to state. Generally stores have remained opened. Cinemas, theaters, clubs, mosques, temples, churches, restaurants, bars etc – anywhere where people gather has been closed. Shops strictly enforce social distancing and at least 4 sqm per person.



 Public education. Hand washing, sanitiser. Social isolation (1.5-2.0m distance from other people, stay home, gatherings of more than 2 people banned, businesses where social distancing cannot be practiced are closed). Use teleconferencing and work from home The history of quarantine has been described in the CDC article and is worth reading: <u>https://www.cdc.</u> gov/quarantine/historyquarantine. <u>html</u>

Today (June 9th) an article has been published in NATURE with a detailed analysis of the benefits of a public health response to COVID- 19 and is available freely: https://www.nature.com/articles/ s41586-020-2404-8\_reference.pdf

This is very well argued and shows that for this highly infectious disease we have had about 7 million cases. Without the public health measures in place, the number could have been much higher. The authors estimate about 530 million infections. This would have been a tragedy beyond human comprehension.

Public health works and the restrictions have been very worthwhile.

#### Here is the abstract:

Governments around the world are responding to the novel coronavirus (COVID-19) pandemic with unprecedented policies designed to slow the growth rate of infections. Many actions, such as closing schools and restricting populations to their homes, impose large and visible costs on society, but their benefits cannot be directly observed and are currently understood only through process-based simulations. Here, we compile new data on 1,717 local, regional, and national non-pharmaceutical interventions deployed in the ongoing pandemic across localities in China, South Korea, Italy, Iran, France, and the United States (US). We then apply reduced-form econometric methods, commonly used to measure the effect of policies on economic growth, to empirically evaluate the effect that these anti-contagion policies have had on the growth rate of infections. In the absence of policy actions, we estimate that early infections of COVID-19 exhibit exponential growth rates of roughly 38% per day. We find that anti-contagion policies have significantly and substantially slowed this growth. Some policies have different impacts on different populations, but we obtain consistent evidence that the policy packages now deployed are achieving large, beneficial, and measurable health outcomes. We estimate that across these six countries. interventions prevented or delayed on the order of 62 million confirmed cases, corresponding to averting roughly 530 million total infections. These findings may help inform whether or when these policies should be deployed, intensified, or lifted, and they can support decision-making in the other 180+ countries where COVID-19 has been reported.

