

Widespread pandemic, wide-ranging response: student-led virtual telemedicine and digital community-based healthcare provision in a university healthcare Centre in response to coronavirus quarantine measures

ABSTRACT

Introduction: Isolation and border control measures, with home quarantine measures, are essential to stem the spread of the newly emergent novel Covid-19. Such measures are doomed to fail if reliant on traditional isolation methods, which entail small numbers of overworked healthcare staff screening and surveilling large numbers of well individuals who are potential false positives. Innovative method employed by Hospital UMS to overcome these logistics difficulties.

Methods: A total of 440 returning China students to UMS were planned for home quarantine measures for 14 days. In the intervening 14 days, groups of ten quarantined individuals were assigned to 1 Mandarin-speaking medical student liaison officer (LO). LOs performed assessment toolkit for 14 consecutive days virtually via WhatsApp and WeChat and reported back to NCOV central command if any symptoms ensued.

Results: 45 China students have been put on home quarantine. Two (2) students with symptoms were monitored virtually till resolution of symptoms. Also, five (5) students with uncontactable phone numbers required tracking down, using various methods eg: retrieval from close contacts through wide-bore virtual search. No cases so far have been positive for NCOV or have required referral to tertiary hospitals. Qualitatively, such methods are a vital public health intervention, as task shifting happens to semi-professionals. Hospital UMS first trial of two cherished founding principles: community-based rather than healthcare-facility center healthcare delivery, and judicious use of digital health communications, applications, and rudimentary telemedicine.

Conclusion: Student-led virtual telemedicine and digital health delivery has potential in public health crises like NCOV, freeing frontline healthcare staff to devote energies to their specialties of screening and treatment. Integration of video and biometrics to incorporate true telemedicine, allowing individuals to be "hospitalized" in a community setting in situations of low risk.