

The motivation to stay safe is undoubtedly present but, without understanding, it can be so easily misguided. We have recently read Greenhalgh and colleagues' 'call to arms' for the public to wear face masks as a precautionary principle.³ Do we not also need to better address the other main means of transmission? We need safer surfaces. ■

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References

- 1 van Doremalen N, Bushmaker T, Morris DH *et al*. Munster, aerosol and surface stability of SARS-CoV-2 as compared with SARS-CoV-1. *N Engl J Med* 2020;382:1564–7.
- 2 Public Health England. *Guidance for food businesses on coronavirus (COVID-19)*. GOV.UK, 2020. www.gov.uk/government/publications/covid-19-guidance-for-food-businesses/guidance-for-food-businesses-on-coronavirus-covid-19 [Accessed 27 April 2020].
- 3 Greenhalgh T, Schmid MB, Czypionka T, Bassler D, Gruer L. Face masks for the public during the covid-19 crisis. *BMJ* 2020;369:m1435.

Prime time for handheld echocardiography in COVID-19 pandemic

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Editor – We are in unprecedented times as the world tries to combat the 2019 novel coronavirus (COVID-19). It is imperative that innovative technologies limiting the spread of COVID-19 within healthcare settings are introduced as initial reports estimate that 3.5% of healthcare workers are becoming infected.

There is much evidence supporting the use of handheld echocardiography (HHE) techniques to augment physical findings during the cardiovascular examination. Now, is the prime time for clinical translation of HHE, mainly to reduce the number of transthoracic echocardiography (TTE) procedures. TTE remains the first-line imaging test for the assessment of cardiovascular disease. TTE systems tend to be bulky, wired for electrical supply and have huge non-sterile exposed areas (keyboard, screens, base-unit) where SARS-CoV-2 could survive for days. Alternatively, HHE devices are small, cheaper, lightweight and only require a single clinician at the bedside as images can be sent wirelessly. Disposable ultrasound probe covers can almost seal these devices limiting any cross-infection. Furthermore, HHE devices have evolved to not only provide B-mode but also include colour Doppler for valvular assessment. Paradoxically, the clinical need for HHE is even more relevant in the current pandemic, as COVID-19 has several cardiovascular clinical presentations. In suspected ST-elevation myocardial infarction, HHE can differentiate left ventricular regional wall motion abnormality versus global dysfunction, the latter favouring a diagnosis of COVID-19 myocarditis. These applications make HHE a far more appropriate option while echocardiography procedures are being rationalised due to high-risk of transmission.^{1–3}

Operability of HHE by medical students and inexperienced clinicians can be obtained rapidly and provide more accurate diagnostic results compared with clinical examination.^{4,5} Thus, there is an urgent need to address these training requirements through the British Society of Echocardiography.

We conclude that HHE can reduce the scanning time, possibly the risk of transmission and minimise costs, while providing reasonable diagnostic information. This will help achieve the goal of protecting patients and healthcare workers. Ultimately, this may lead to a change in standard practice following COVID-19 as the benefits of bedside HHE are realised. ■

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References

- 1 Kirkpatrick JN, Mitchell C, Taub C *et al*. ASE statement on protection of patients and echocardiography service providers during the 2019 novel coronavirus outbreak. *J Am Coll Cardiol* 2020;S0735-1097(20)34815-4 [Epub ahead of print].
- 2 Wahi S, Thomas L, Stanton T *et al*. CSANZ imaging council position statement on echocardiography services during the COVID-19 pandemic. *Heart Lung Circ* 2020;S1443-9506(20)30127-X [Epub ahead of print].
- 3 British Society of Echocardiography. *Clinical guidance regarding provision of echocardiography during the COVID-19 pandemic*. BSEcho, 2020. <https://bsecho.org/covid19> [Accessed 05 April 2020].
- 4 DeCara JM, Kirkpatrick JN, Spencer KT *et al*. Use of hand-carried ultrasound devices to augment the accuracy of medical student bedside cardiac diagnoses. *J Am Soc Echocardiogr* 2005;18:257–63.
- 5 Stokke TM, Ruddox V, Sarvari SI *et al*. Brief group training of medical students in focused cardiac ultrasound may improve diagnostic accuracy of physical examination. *J Am Soc Echocardiogr* 2014;27:1238–46.

COVID-19, hydroxychloroquine and the eighth alternative

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Editor – The duty of a physician has been proposed as 'cure occasionally, relieve often, comfort always.'

'Comfort always' relates to the art of medicine. The scientific underpinnings of medicine evolved over centuries and is currently founded upon evidence-based medicine (EBM). EBM is data driven; stratified into a hierarchy with meta-analysis of randomised controlled trials at the top.¹ Seven 'alternatives' to EBM in the absence of evidence are eminence, vehemence, eloquence, providence, diffidence, nervousness and confidence-based medicine.² The eighth and the latest entrant to this august group is 'propaganda-based medicine' (PBM). The rise of PBM has been driven by the ubiquitous presence of social media platforms which influence popular opinion and the main vehicle for the dissemination of information in today's world. Healthcare and beliefs are very much an integral part of this social media driven information society. These platforms have far reaching influence, significantly more than the conventional peer-reviewed scientific publications and websites in shaping public opinion. Claims of efficacy of drugs

or other interventions based on questionable scientific data are posted, gain traction and propagated without fact checking. They may often go 'viral' to a global audience – who accept it as received wisdom. Political patronage gives it greater validity. PBM allows an item to transition from quasi-science to almost an element of faith with significant unintended consequences.

An example of PBM in the context of the COVID-19 pandemic was witnessed with the drug hydroxychloroquine. Despite conflicting results from small studies, with no or little evidence regarding prevention discussed in different reviews, it has been adopted as a therapeutic option and made its way into national guidelines.^{3–5} The drug flew off the shelves causing a global shortage for lupus patients who actually would benefit from it.⁶

This was a classic example of the triumph of PBM over EBM. It reinforces the concept that there can be no shortcuts in science, particularly when so much is at stake. The inefficacy of hydroxychloroquine for the treatment of established COVID-19 infection has now been demonstrated in the large prospective RECOVERY trial.⁷ ■

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References

- 1 Evidence-Based Medicine Working Group. Evidence-based medicine: a new approach to teaching the practice of medicine. *JAMA* 1992;268:2420–5.
- 2 Isaacs D, Fitzgerald D. Seven alternatives to evidence based medicine. *BMJ* 1999;319:1618.
- 3 Ferner RE, Aronson JK. Chloroquine and hydroxychloroquine in COVID-19. *BMJ* 2020;369:m1432.
- 4 Kim AH, Sparks JA, Liew JW *et al*. A rush to judgment? Rapid reporting and dissemination of results and its consequences regarding the use of hydroxychloroquine for COVID-19. *Ann Intern Med* 2020;M20-1223 [Epub ahead of print].
- 5 Chattopadhyay A, Mishra D, Sharma V, K Naidu GS, Sharma A. Coronavirus disease-19 and rheumatological disorders: A narrative review. *Indian J Rheumatol* 00;0:0.
- 6 Mehta B, Salmon J, Ibrahim S. Potential shortages of hydroxychloroquine for patients with lupus during the coronavirus disease 2019 pandemic. *JAMA Health Forum* 2020;1:e200438.
- 7 Chief investigators of the Randomised Evaluation of COVID-19 thERapY (RECOVERY) Trial. *No clinical benefit from use of hydroxychloroquine in hospitalised patients with COVID-19*. Nuffield Department of Population Health, 2020. www.recoverytrial.net/news/statement-from-the-chief-investigators-of-the-randomised-evaluation-of-covid-19-therapy-recovery-trial-on-hydroxychloroquine-5-june-2020-no-clinical-benefit-from-use-of-hydroxychloroquine-in-hospitalised-patients-with-covid-19

DNACPR decisions

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Editor – Harrington, Price and Edmonds describe a quality improvement project of documentation and communication of do not attempt cardiopulmonary resuscitation (DNACPR) decisions via

the use of an integrated electronic health records system.¹ However, it is inadequate to describe that the 2014 Court of Appeal in *Tracey v Cambridge Uni Hospital NHS Foundation Trust & Ors* ruled that Janet Tracey's human rights were breached simply as a result of a lack of communication of such a decision.²

Importantly, while simultaneously reinforcing the fundamental professional requirement not to harm, and that cardiopulmonary resuscitation (CPR) cannot be demanded whatever the patient's wishes, the Court of Appeal asserted that the human rights presumption for *involvement* in the decision. This involvement in a decision being a very different responsibility from the communication of a finalised one, requiring an open mind; the desire to understand and achieve wherever possible the wishes and preferences of the individual concerned; and consideration of the person's views in the final decision – which then needs to be communicated appropriately. There need to be convincing reasons not to involve the patient – patient choice would clearly be one, but distress alone would be insufficient, rather requiring a significantly higher threshold of psychological or physical harm. Ultimately, it is this involvement and knowledge of the final decision which then allows the person the opportunity to seek a second opinion if so desired.

Finally, the Tracey judgment should always be understood alongside the subsequent *Winspear v City Hospitals Sunderland NHS Foundation Trust* judgment and that if a person lacks decision-specific mental capacity at the time, the resulting best interests decision requires involvement, where practical and appropriate, with appropriate family / welfare attorney(s) irrespective of the time of day or night.^{3,4} ■

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References

- 1 Harrington L, Price K, Edmonds P. From paper to paperless: Do electronic systems ensure safe and effective communication and documentation of DNACPR decisions? *Clin Med* 2020;20:329–33.
- 2 *Tracey v Cambridge Uni Hospital NHS Foundation Trust & Ors* [2014] EWCA Civ 822. Royal Courts of Justice, 2014.
- 3 *Winspear v City Hospitals Sunderland NHS Foundation Trust* [2015] EWHC 3250 (QB). Royal Courts of Justice, 2015.
- 4 *Mental Capacity Act 2005: Section 4*. GOV.UK, 2012.

NEWS2 system requires modification to identify deteriorating patients with COVID-19

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Editor – The UK National Early Warning Score 2 (NEWS2) was developed as a track-and-trigger system to ensure a nationally uniform, evidence-based approach to early identification of the deteriorating patient in the UK. It allows monitoring of patients' vital signs and succinct reporting to clinical decision makers, facilitating early intervention in deteriorating patients.¹

Patients with severe COVID-19 develop hypoxic respiratory failure reminiscent of acute respiratory distress syndrome (ARDS).² ARDS severity is measured by the Berlin criteria, where degree of severity is defined as deteriorating arterial oxygen partial pressure