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Resuscitation





Letter to the Editor

The other side of novel coronavirus outbreak: Fear of performing cardiopulmonary resuscitation



To the Editor.

When CPR is immediately performed before ambulance arrival, the chances of survival are three times higher. Nevertheless, laypeople are historically afraid they may contract an infectious disease while performing cardiopulmonary resuscitation (CPR). The spread of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) emerged in China at the end of 2019 has become a global public health concern. SARS-CoV-2 is generating panic across the globe due to the outbreak of the Coronavirus disease 2019 (COVID-19). With the advent of social media-related misinformation, the fear of contracting COVID-19 also affected emergency situations requiring immediate bystander interventions, such as cardiac arrest. The dangerous combination of fear and misinformation might decrease the willingness to provide help to someone who suddenly collapses in a public place and further drop the rate of bystander-initiated CPR.

We read the case of 60-year-old Chinese man experiencing an out-of-hospital cardiac arrest outside of a restaurant in Sydney. As reported in newspapers, bystanders did not perform CPR for fear of the man being infected with SARS-CoV-2. Resuscitation manoeuvres were started only at ambulance arrival, and the man eventually did not survive.²

While it is understandable to be concerned by the novel coronavirus, in our opinion laypeople should be encouraged to start CPR and use an automated external defibrillator (AED) in any unresponsive victim not breathing normally, following current guidelines for resuscitation. If laypeople are worried by potential infectious disease transmission, continuous chest-compression-only CPR should be started, without mouth-to-mouth ventilation.^{4,5} The Resuscitation Council of United Kingdom released a statement on COVID-19 and resuscitation in community settings advising to recognise cardiac arrest only by looking for the absence of signs of life and normal breathing, without the look, listen, and feel technique.³ However, such advice may have to change as the knowledge in treating COVID-19 patients evolves. Basic precautions such as washing hands and using personal protective equipment if available are recommended.

The unfortunate event in Sydney reflects how fragile the willingness to perform resuscitation may be. Concerns about disease transmission related to CPR should be addressed during CPR courses before periodic pandemics. Moreover, to inform the community on the safety of CPR and to contrast the spread of misinformation, public campaigns through social media along with

conventional initiatives should be highly promoted and endorsed by healthcare institutions. Particular recommendations should be given to citizens acting as first responders alerted through mobile-phone technology and to emergency dispatchers assisting bystanders to perform CPR over the phone during the emergency call. In addition, we strongly suggest that emergency medical services should monitor rates of bystander-CPR in their systems to take adequate and prompt countermeasures. When this pandemic will end, many efforts may be needed to strengthen the first links of the survival chain as before the COVID-19 outbreak.

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REFERENCES

- Sasson C, Rogers MA, Dahl J, Kellermann AL. Predictors of survival from out-of-hospital cardiac arrest: a systematic review and metaanalysis. Circ Cardiovasc Qual Outcomes 2010;3:63–81.
- Chung F. Bystanders 'feared coronavirus' after man collapsed outside Chinatown restaurant. (Retrieved 09 February 2020, at https://www. news.com.au/lifestyle/health/health-problems/bystanders-fearedcoronavirus-after-man-collapsed-outside-chinatown-restaurant/newsstory/4b1c6810fd911ec3f4f2b568b3695e10).

- Resuscitation Council UK Statement on COVID-19 in relation to CPR and resuscitation in first aid and community settings. (Retrieved 15 March 15 2020, at https://www.resus.org.uk/media/statements/ resuscitation-council-uk-statements-on-covid-19-coronavirus-cprand-resuscitation/covid-community/).
- Perkins GD, Handley AJ, Koster RW, et al. Adult basic life support and automated external defibrillation section Collaborators. European Resuscitation Council Guidelines for Resuscitation 2015: section 2. Adult basic life support and automated external defibrillation. Resuscitation 2015;95:81–99.
- Soar J, Maconochie I, Wyckoff MH, et al. 2019 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations: summary from the basic life support; advanced life support; pediatric life support; neonatal life support; education, implementation, and teams; and first aid task forces. Circulation 2019;140:e826—80.

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