Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.
Survival to hospital discharge was 8.6% in 2016, 11.9% in 2017, and 12.7% in 2018. Survival to hospital discharge in Utstein comparator group (defined as bystander-witnessed OHCA with an initial shockable rhythm) was 27% in 2016, 31.7% in 2017, and 45.8% in 2018.

Conclusions: Survival to hospital discharge in Kaunas (Lithuania) in 2016–2018 were slightly better to those reported as median in EuReCa TWO study.

Reference

1 Grasner JT, Wnten J, Herlitz J, et al. Survival after out-of-hospital cardiac arrest in Europe – results of the EuReCa TWO study. Resuscitation 2020;148:218–26.

https://doi.org/10.1016/j.resuscitation.2020.08.099

PT33
The adherence to modified callers queries (MCQ) of emergency medical dispatch (EMD) during COVID-19 outbreaks for out-of-hospital cardiac arrest

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Purpose: Setting modified-callers-queries (MCQ) was recommended for emergency medical dispatch (EMD) for COVID-19 risks screening during the outbreaks. For out-of-hospital cardiac arrest calls, the adherence to MCQ and its influence to dispatcher-assisted CPR were not known.

Materials and methods: A COVID-19-risk MCQ protocol was designed for EMD for safer corresponding response. The three major additional queries included A. The quarantine status of patient/family, B. Patient symptoms (i.e., fever/or respiratory complaints), C. TOCC situations in the recent 14-day period of patient/family including: recent travel (T) to the epidemic regions, occupations (O) with high risk for client contact such as healthcare provider, flight attendant, etc., any close contact (C1) with confirmed COVID-19 patient or person been quarantined, and close contact with a cluster (C2) of people with similar symptoms. The dispatchers’ adherence to the COVID-19-risk MCQ during the outbreaks for EMS calls of non-traumatic OHCA was retrospectively evaluated using audio records. Data were analyzed using Pearson’s chi-squared test and Kruskal-Wallis test with SPSS-Version-22.

Results: For totally 153 eligible OHCA calls, the adherence to querying were noted for A. quarantine on 44 (28.8%) cases, for B. symptoms on 82 (53.6%), for C. any TOCC on 105 (68.6%) cases – T: 102 (66.7%), O: 31 (20.2%), C1: 71 (46.4%), C2: 26 (17.6%); and completed TOCC on only 14 (9.2%) cases. Completed MCQ (all three A, B, C) were adhered on only 6 (3.5%); [95%CI: 1.0–6.6%]) cases, and 45 (29.4%; [95%CI: 22.8–37.1%]) cases failed to receive any COVID-19-risk MCQ. Eight cases (8/105, 7.6%) inadequately received TOCC queries prior to recognizing patient consciousness. The time intervals (median, IOR) for call-to-chest-compression and total MCQ of those completely queried cases were 290 (206, 334) s and 52 (22, 94) s.

Conclusions: The EMD adherence to COVID-19-risk MCQ would be unsatisfied to achieve under the circumstances of OHCA. MCQ would influence call-to-compression for dispatcher-assisted CPR.

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PT34
Remote support using smartglasses for the facilitation of neonatal resuscitation simulation training

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Purpose of the study: There are many inexperienced Neonatal-Cardio-Pulmonary-Resuscitation instructors in Japan. They have not sufficiently advanced educational training to teach provider trainees. Therefore, it is not always easy for novice instructors to facilitate resuscitation scenario training. Also, with the global spread of coronaviruses, the participation of experienced instructors from outside their own facilities should be avoided for contact prevention purposes. One way to tackle this problem is to provide remote assistance. We have been developing a device to conduct remote simulation training for neonatal resuscitation since 2017. In this study, we have developed and tested the system that enables remote educational support using the latest smartglass.

Method: We tested smartglasses made in Japan, in this study. These devices are hands-free and each can record video and has a head-mounted display. In a NCPR provider course, the instructor who conducts the course at the site wears smart-glasses and facilitates scenario training with a remote advisor under internet communication. At a remote site, an expert instructor calculates the performance score to assess the trainee’s behavior/cognition/teamwork based on the checklist and displays it on the smartglass display for advice during debriefing. A checklist of individual/team performance was constructed that included cognitive/technical and behavioral aspects. To assess the validity of this system operation, a total of 10 scenario training sessions were conducted in the scenario training of the NCPR course for six nurses at Kyoto University Hospital.

Results: There were no problems with audio and communication using smartglass under the Internet. Instructors watching the course videos on the remote site in realtime were able to calculate trainee’s score easily. The checklist score results were displayed on the smartglasses display, so the novice instructors were able to facilitate the debriefing and manage the course easily.

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PT35
Relationship between ventilation volumes caused by chest compressions and the artefact on capnograms during in-hospital CPR

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Aim: Several studies have quantified the ventilation volumes, smaller than anatomical dead space, produced by chest compressions (CCs) during CPR. Other studies have analyzed the artefact