39 FAMILY PRESENCE DURING RESUSCITATION – A PROTOCOL OF A COCHRANE SYSTEMATIC REVIEW

^{1,2,3}MA Rubin*, ⁴SF Herling, ⁵TW Klausen, ^{6,7,8}P Jabre, ^{1,2,3}AM Møller. ¹Department of Anaesthesia, Herlev and Gentofte Hospital, University of Copenhagen, Herlev, Denmark; ²Cochrane Emergency and Critical Care, Herlev and Gentofte Hospital, University of Copenhagen, Herlev, Denmark; ³Cochrane Anaesthesia, Herlev and Gentofte Hospital, University of Copenhagen, Herlev, Denmark; ⁴The Neuroscience Centre, Rigshospitalet, University of Copenhagen, Copenhagen, Denmark; ⁵Department of Hematology, Herlev Hospital, Herlev, Denmark; ⁶Assistance Publique-Hôpitaux de Paris (AP-HP), SAMU (Service d'Aide Médicale Urgente) de Paris, Hôpital Universitaire Necker-Enfants Malades, Paris, France; ⁷Institut national de la santé et de la recherche médicale (Inserm) U970, Paris-Centre de recherche Cardiovasculaire (PARCC), Université Paris Descartes, Paris, France; ⁸Cochrane Pre-hospital and Emergency Care Field, Paris, France

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Background Family presence during resuscitation (FPDR) is a growing praxis despite most evidence is of low quality.¹ The aim of this review is to investigate if FPDR might decrease PTSD-related symptoms including signs of depression/anxiety. We also want to explore the effect on medical care and patient survival.

Method We will include randomized controlled trials (RCTs) and perform a meta-analysis after assessment of heterogeneity, if appropriate. For dichotomous outcomes Mantel Haenszel test will be used, for continuous outcomes inverse variance and for rare events, Peto's odds ratio. The quality of evidence will be assessed using the GRADE-method.

Results Preliminary search results identified 564 articles for screening leading to four RCTs. This leads to a sample size of 1388. A cluster-RCT of 570 relatives showed positive effects of FPDR on relatives' psychological outcomes during pre-hospital CPR and no effects on patient mortality or personnel distress.² The largest RCT with a sample size of 705 investigated FPDR of paediatric patients, but had a high risk of bias.³

Conclusion We hypothesize that there is a lack of high quality research regarding FPDR, but that the evidence indicate an association with overall positive results on relatives' psychological outcomes and that it doesn't affect the health-care professionals, morbidity, or mortality of the patients negatively.

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Conflict of interest P. Jabre is the first author of an included primary study (which she has conducted) in the Cochrane Review (2). She will not extract data from her own study. Instead, M.A. Rubin and A.M. Møller will extract these data, and check the interpretation against the study report and any available study registration details or protocol.

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40 LONG AMBULANCE RESPONSE TIME IS ASSOCIATED WITH HIGHER INCIDENCE OF CARDIOPULMONARY RESUSCITATION AND DEFIBRILLATION BY DISPATCHED CITIZEN FIRST-RESPONDERS

¹L Andelius*, ^{1,3}CM Hansen, ¹F Lippert, ^{1,2}L Karlsson, ⁴C Torp-Pedersen, ^{2,5}GH Gislason, ^{1,2}F Folke. ¹Emergency Medical Services Copenhagen, University of Copenhagen, Denmark; ²Department of Cardiology, Herlev Gentofte University Hospital, Denmark; ³Department of Cardiology, Nephrology, and Endocrinology, Copenhagen University Hospital Hillerød, The Region of Northern Zealand, Denmark; ⁴The Department of Health Science and Technology, Aalborg University, Aalborg, Denmark; ⁵The Danish Heart Foundation, Copenhagen, Denmark

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Background Dispatching citizen first-responders by a smart-phone application (app) might increase incidence of bystander cardiopulmonary resuscitation (CPR) and defibrillation in out-of-hospital cardiac arrest (OHCA). We investigated citizen first-responder rates of CPR and defibrillation according to ambulance response time.

Method From September 1, 2017 to September 1, 2018, 23 021 citizen first-responders registered through the app. After being dispatched, citizen first-responders reported whether they performed CPR or defibrillation. Distances were calculated as straight line. Ambulance response time was defined as time from dispatch to vehicle stop. Citizen first-responder CPR and defibrillation were calculated according to ambulance response times (10 min).

Results The Emergency Dispatch Center activated the system in 837 suspected OHCA where 51% (n=431) were confirmed as cardiac arrests eligible for inclusion. The median distance from citizen first-responder to OHCA was 628 meters (365,902; Q1, Q3), corresponding to 5 min and 14 s citizen first-responder response time (assumed speed of 2 m/s). For ambulance response times 10 min, citizen first-responders performed CPR in 29% (n=42), 40% (n=91), and 65% (n=39) of the cases, p<0.0001, respectively. The corresponding figures for defibrillation according to ambulance response time were 8% (n=11), 16% (n=36), and 28% (n=17), p=0.0005. Citizen first-responders defibrillated at total of 15% (n=64) of all OHCA.

Conclusion A total of 15% of all OHCA patients were defibrillated by citizen first-responders. Longer ambulance response times were associated with higher rates of citizen first-responder CPR and defibrillation.

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41 NATIONAL EARLY WARNING SCORE (NEWS) EVALUATION IN AN AMBULANCE-NURSE: ONE-YEAR EXPERIENCE IN PORTUGAL

¹P Vasconcelos*, ¹A Oliveira, ¹T Augusto, ¹L Ladeira, ¹J Lourenço, ²F Barros, ²R Ramos. ¹Registered Nurse at National Institute of Emergency Medicine, Portugal; ²Medical Doctor at National Institute of Emergency Medicine, Portugal

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