

EMuRgency - New approaches for resuscitation support and training in the Euregio Meuse-Rhine

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Purpose of the study: Cardiac arrest is an extremely time-critical emergency. In the Euregio Meuse-Rhine, the shared border region of the Netherlands, Belgium and Germany, bystander CPR is only performed in about 27% of the pre-hospital cases (1). Main reasons are described as a lack of knowledge, uncertainty and fear of laymen (2). The project EMuRgency aims to raise awareness about cardiac arrest and to increase the rate of bystander CPR before EMS (Emergency Medical Service) arrival.

Materials and methods: A smartphone notification system is currently developed. Registered trained rescuers will be localized in case of a cardiac arrest, notified and guided to the victim, if in direct vicinity (3). Low-threshold educational products are developed following the guidelines of the European Resuscitation Council (ERC). A flexible preparatory E-Learning course will be published as an Open Educational Resource (OER). Furthermore, mobile training and support apps are developed and evaluated to support continued training of CPR skills in non-formal contexts and facilitate AED use and awareness. (4) Moreover, an inter-regional school-network is currently established.

Results/Conclusion: The EMuRgency project is a medical-based socio-technological innovation project. An increased rate and quality of CPR begun before arrival of the EMS is sought after. In all three countries (B, D, NL) a dispatch-center controlled smartphone notification system will be established in accordance with each legal system and in support of the different processes of the local dispatch centers. To increase awareness of the public we are seeking to employ existing public displays with intelligent interaction modes in the region.

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