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► To cite this version:

François Morin, Alexis Descatha, Thomas Bizouard, Delphine Plard, Marc Fadel, et al.. Basic life support training in out-of-hospital cardiac arrest: From the youth to a special "Senior Force Against Cardiac Arrest". *Resuscitation*, 2021, 167, pp.225-226. 10.1016/j.resuscitation.2021.08.031 . hal-03359357

HAL Id: hal-03359357

<https://hal.science/hal-03359357v1>

Submitted on 15 Oct 2021

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LETTER TO THE EDITOR – RESUSCITATION Journal

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Word count: 490 words

Keywords: Basic life support training; Out-of-hospital cardiac arrest; Occupational Medicine.

Basic life support training in out-of-hospital cardiac arrest: from the youth to a special “Senior Force Against Cardiac Arrest”

To the Editor,

The annual incidence of out-of-hospital cardiac-arrest (OHCA) in Europe is between 67 to 170 per 100,000 inhabitants [1]. Survival is still low, estimated between 4.6 and 8%, and justifies a rapid implementation of the survival chain and a perfect application of its components [2]. Cardiopulmonary resuscitation techniques have continued to evolve, improving overall survival [3]. However, although very codified, these “basic life support” (BLS) techniques are still insufficiently implemented by first lay rescuers/First Aiders [2]. Recent European resuscitation guidelines for the management of cardiac arrest have reminded us the major determinants of a return of spontaneous circulation (ROSC). One is the earliest possible implementation of the BLS by the CPR lay rescuers [1].

For this system to work and to increase survival of OHCA, it is essential that a maximum number of citizens are trained to perform BLS. This number depends directly on the government’s policies to promote initial training and develop these skills. Thus, in many countries, CPR training is focused on young people, at schools or early active working life [4]. However, the rate of first aid training remains very low in industrialized countries, and particularly among the elderly [5]. We have reason to believe that policies of BLS training must be intensified with this population for several reasons among elderly (age > 65 years old):

- Younger elderly people (age of 65-75 y.o.) are usually on the front line of the OHCA of people in their age groups;
- The ability to perform BLS is achievable by all ages outside of pediatrics, regardless of age [6];
- The CPR level is of acceptable quality for elderly laypersons with CPR training [7];
- Elderly rescuers have less muscle strength but could, with alternative techniques like “changing their roles sooner than every 2 minutes” or a “four-hand CPR”, performed an efficient basic life support [8];
- Older people now master the means of telecommunications that enable them to be alerted by modern digital tools like younger citizens;
- Elderly could activate speaker function quickly for continuous telephone CPR [9].

While CPR training is facilitated at school and in the working population, one of the most appropriate ways to promote BLS among the elderly would be to train them as late as possible in their working life, i.e., in “pre-retirement”. In France, a recent decree made mandatory for employers to promote BLS training to pre retirees [10]. Approximately 650 000 active workers are retiring every year in France. Their employers will need to provide them the possibility to have BLS training. Public and private training organizations will therefore have to adapt to ensure this new training load. The effects of this policy will have to be studied, but and we feel this should be implemented in all countries with similar emergency care training systems.

In conclusion, France intends to have, in the coming years a “Senior Force Against Cardiac Arrest” in addition to youth training at school.

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Acknowledgements

We thank all the team of the Centre for Emergency Care Teaching (CESU 49) of the University Hospital of Angers, especially Damien Chauvat, Aurélien Marquis and Aurélien Sechet, who are particularly implicated in basic life support training.