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Letter to the Editor

KIDS SAVE LIVES BRAZIL: A successful pilot program to implement CPR at primary and high schools in Brazil resulting in a state law for a training CPR week

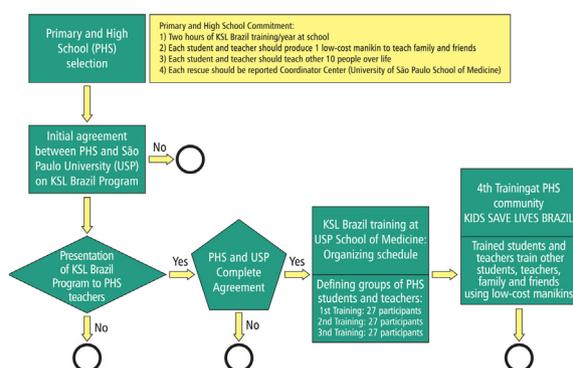


Sir,

Brazil is the biggest country in South America, with more than 207 million of inhabitants. From them, 15% of the population is in primary and high schools. The worldwide KIDS SAVE LIVES campaign^{1–3} was first implemented in Brazil as KIDS SAVE LIVES BRAZIL by a group of associate professors, researchers and graduate students from multidisciplinary areas of University of São Paulo. KIDS SAVE LIVES BRAZIL program sought to train school community as all citizens can save a life⁴ to know, to identify and to

take effective first actions in cardiac arrest, acute stroke and choke. We used a specific learning process of competences based on “who teaches, can better learn”: we trained members of the University community that, in turn, were enrolled as trainers for the next participants (students, teachers and employees, the “school-community”) at Skills Health Laboratory with high-fidelity manikins. Then, these participants were enrolled as trainers for the school-community members *in loco* at school and using low-cost manikins

A. Kids Save Lives Brazil Flowchart for Schools



C. Folder



D. T-shirt



E. Tag



F. Botton



B. Cartoon of Activities nº1

G. Low-cost handmade manikins



Fig. 1 – A flowchart and materials developed for Kids Save Lives Brazil.

handmade with recycled materials. Using these handmade manikins, schoolchildren and adolescents can teach their family, friends and neighbors. We developed and use a flowchart and materials to differentiate and to spread KIDS SAVE LIVES BRAZIL program (Fig. 1). To understand the scenario in school, we conducted a survey on key principles of KIDS SAVE LIVES BRAZIL before training. The survey covered several topics on cardiac arrest and CPR. From 1366 students, we received 857 responses (62.7%), from children 7–12 years (25.3%) and adolescents 13–20 years (74.7%). Among the responders, 11.9% declared to have witnessed victims getting unconscious, 79% declared no knowledge on cardiac arrest, 73.4% declared that CPR was an important topic education at school and 65% declared that it should be compulsory. Low rates of effective competences were declared before intervention: 7.6% would know how to check victims responsiveness and breathing, 30% would call medical emergence service after no victims response, 64.3% would dial the right number, 31% would be able to follow orientations about chest compressions, 2% would provide 100–120 compressions/minute, and 6% would appropriately use an external automatic defibrillator. After training, participants' (aged > 9 years) skills were assessed: 98.5% performed clear identification of emergence situation and local safety, 98.5% succeeded to assess victims responsiveness and breathing, 97% were able to call for help, 95.5% performed immediate CPR and 76.1% were effective, 95.5% correctly used defibrillator (when bystander > 12 years), 94% returned to chest compression immediately thereafter and 97% positioned the conscious victim in the recovery position. Using self-reported satisfaction survey after training, 94% reported good/very good skill practice with high-fidelity manikins, 82.1% reported good/very good performance, 94% reported that instructors showed good/very good teaching skills and 86.1% reported good/very good the overall learning process.⁵ We started to establish a State Law 310 (dated April 2, 2019) to have a week to promote, to train and to spread knowledge, skills and attitude for students, teachers and the employees of the basic and high schools including the community around, named KIDS SAVE LIVES BRAZIL.

Conflict of interest

Naomi Kondo Nakagawa* is an Associate Editor, Clinics. Maria José Carmona Carvalho is the Editor, Brazilian Journal of Anaesthesiology. Sergio Timmerman is an Associate Editor, Resuscitation. Federico Semeraro is SEC BLS co-chair European Resuscitation Council (ERC); Past President Italian Resuscitation Council. Bernd W. Böttiger is European Resuscitation Council (ERC) Board Director Science and Research; Associated Editor, European Journal of Anaesthesiology (EJA); Speakers honorarium from Medupdate, FoMF, Baxalta, Bayer Vital, Bard; Chairman, German Resuscitation Council (GRC); Board Member, German Society of Interdisciplinary Intensive Care and Emergency Medicine (DIVI); Associated Editor, Resuscitation.

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