

Cardiopulmonary resuscitation training in spanish schools: when first link is not well recognized

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Background: First aid teaching is mandatory in Spanish schools, but there is a variability in how training is performed within different regions of the country. We aimed to study the degree of implementation of school cardiopulmonary resuscitation (CPR) training in Spain.

Methods: A nationwide cross-sectional survey was carried out from February to December 2019. A self-administered questionnaire was carried out aimed at school children. The association between school children characteristics (sex, age and previous CPR education training) and CPR knowledge was evaluated.

Results: A total of 5892 valid school children surveys were collected. Regarding to school children, mean age was 14.67 years and 36,2% of them had received CPR training, with similar distribution by sex and with an increase in higher courses (28.7% <13 years, 33.9% 13-16 years, 54.9% >16 years; p = 0.002). At older all CPR knowledge improves, except the telephone emergency number. Comparing school children who had or not received previous CPR training, there was no difference in correctly identifying the emergency telephone number (p = 0.169) or OHCA (p = 0.05), but school children (32.4% vs 29%, p = 0.005) who have not received the training better recognize the telephone number.

Conclusions: the implementation of CPR training programs is insufficient in spanish schools and they also do not work to remember the emergency number. Urgent action is required to improve the first link of the survival-chain by disseminating the emergency telephone number.

Table 1 – Students surveys main results

Variables	N	%
Autonomous communities responses	53	0.9
Castile la Mancha	213	3.6
Valencia	6	0.1
Andalucía	41	0.7
Castile Leon	81	1.4
Extremadura	3823	64.9
Catalonia	357	6.1
Aragon	47	0.8
Madrid	6	0.1
Navarra	1263	21.4
Canary Islands		
Mean age (years)	14.67 (± SD 1.92)	
Age distribution	830	14.2
< 13 years	4164	71.4
13 - 16 years	843	14.4
> 16 years		
Female	2927	50.1

Variables	N	%
CA knowledge	1836	31.2
Emergency number	379	6.4
061 or 112	3675	62.4
Hospital or police number	452	7.7
Other or unknown	2472	42.2
CPR identification	2748	46.9
Unconscious	188	3.2
Unconscious not breathing		
Unconscious not breathing, no pulse		
Others		
CPR experience	504	8.6
Witnessing CA		
CPR teaching	4086	69.6
Hearing about CA	2107	36.2
CPR training	4077	70.1
Hearing about AED	2048	35.3
Closest AED knowledge		