

## First aid education among primary school pupils: an exploratory intervention engaging family members



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Introduction – Background

- - Countries where first aid gestures are taught  $\rightarrow$  Lower death rate after a hearth attack (Lindner & al., 2011)



In Belgium, one out of two citizens know what an AED is and only 30% of them know how to use it (Ligue Cardiologique Belge, 2016)



Schools could play an active role to increase awareness and competences about first (Lukas & al., 2016), even with children aged from 8 to 12 years old (Lubrano & al., 2005 / Plant & Taylor, 2013)



## Objective

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Asses the impact of a first aid cycle provided by PE teachers in the Chaudfontaine municipality of (Belgium) on 5<sup>th</sup> and 6<sup>th</sup> grade children and their relatives





Children love to share their knowledge to their relatives. First aid competences learned during PE classes could also be transferred to the family (Plant & Taylor, 2013)

## Methodology First aid lesson 1 First aid lesson 2 First aid lesson 3 One day first aid First aid posttraining to PE teachers intervention (n=6) Satisfaction and personal opinion questionnaire evaluation (E1) Pre-cycle Cycle Post-cycle First aid post-Relatives questionnaire 1 (R1) Relatives questionnaire First aid evaluation by 2 (answers given by the COVID-19 relatives intervention Pupils questionnaire 1 (P1) children) (H1) evaluation 2

**Results and discussion** 

Evolution of first aid knowledge

CPR and AED use

Improvement of the knowledge (p < 0,0001) of students in all classrooms due to the cycle.

Similar results in the studies of Lubrano & al. (2005) and Plant & Taylor (2013)

H1 scores are superior compared to R1 scores. From the relatives perspectives, more of them felt afterwards ready "to save lives" assuming a possible knowledge transfer from children to their relatives.

Only one practical assessment was operated due to the pandemic (E1)

Theoretical principles such as safety rules, assessment of consciousness and theory about CPR globally obtained good scores.

→ Children aged from 6 to 7 years old are capable to asses consciousness and respiration (Plant & Taylor, 2013)

Students	P1	H1	R1				
n=146	Mean score (± SD) /20						
	6,26 ± 3,04	14,52 ± 2,2	12,01 ± 3,75				

Students	Safety (/10) Conscio- usness (/10)			Pocovory	Total				
		usness	CPR (/10)	AED (10)	Recovery position (/10)	Mean score (/20)	SD (/20)	Min. (/20)	Max. (/20)
n=146	7,67	7,28	7,55	7,56	8,13	15,30	± 2,23	7,20	20

## Teachers, students and relatives opinion

stakeholders were enthusiastic about All learning first aid at school (similar results in the study of Plant & Taylor, 2013) even though one teacher said that PE teachers may not be the right people to it.



Results are encouraging with a great knowledge improvement by the students which means that PE teachers are capable to give first aid lessons.

CPR can be hard for the children due to their height and weight but they are capable to explain it (Shérif & al., 2007).

Finally, the overall opinion about the study was great and relatives felt afterwards more ready "to save lives".

Bibliography can be ask by mail to : ypetitfrere@uliege.be



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