

Belgian Red Cross Flanders

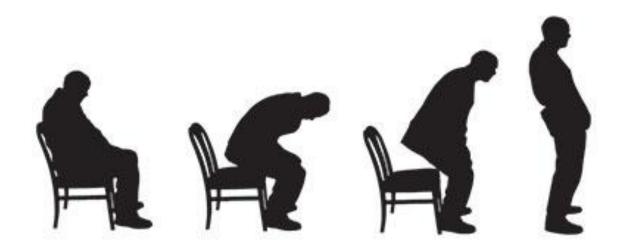
Developing evidence-based first aid educational materials for children in sub-Saharan Africa

Lieve Adam – Focal Point First Aid International Cooperations (BRC-Flanders) Jorien Laermans – Researcher Centre for Evidence-Based Practice (CEBaP)





First Aid





- 1. Did you ever deliver first aid in a public area?
- 2. Do you know where you can find the first aid kit at your workplace?
- 3. Did you ever witness a child delivering first aid to someone else?





First Aid education

Red Cross & First Aid

- Why First Aid ?
- BRC First Aid programmes

BRC-FI Programmes

- Use of contextualised material for adults
- Capacity building programmes
- First Aid youth material

Challenges

• First Aid in the curriculum



Why First Aid?

- + Core business
- + 191 National Societies over the world
- + Last mile volunteers in the community
- + First aid training:
 - low-cost opportunity to decrease the burden of disease and injury in sub-Saharan Africa (World Bank)



Belgian Red Cross & First Aid

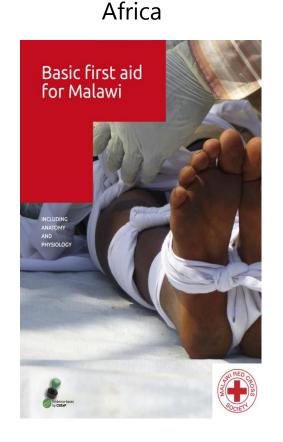
- + National expertise
- Development of International First Aid and Resuscitation guidelines with International Federation of Red Cross and Red Crescent Societies





Belgian Red Cross First Aid programmes

+ Contextualised first aid material

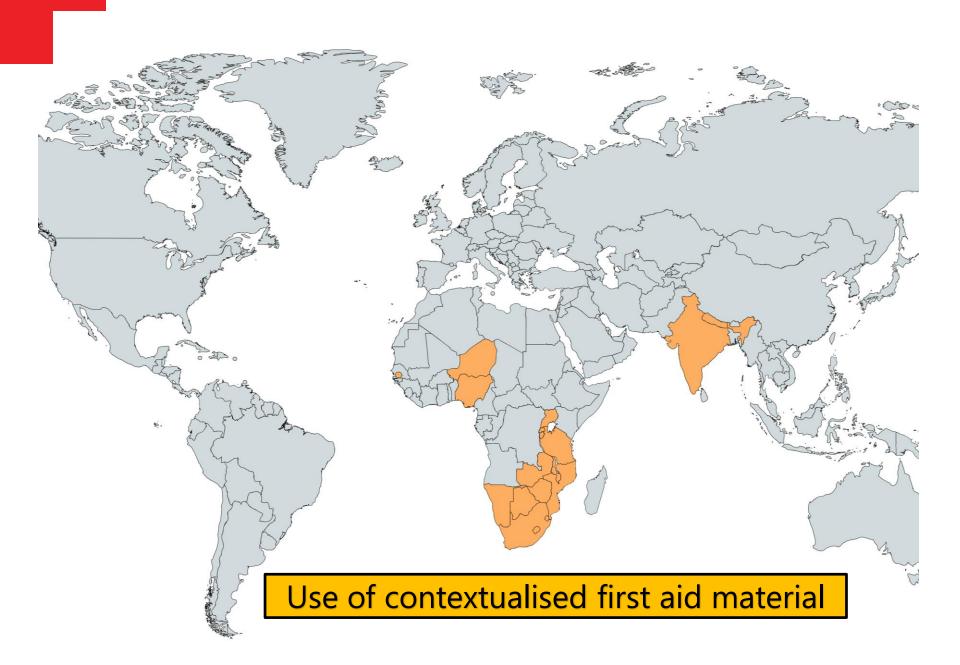


Nepal First Aid Manual 2017

Nepal Red Cross Society

India





+ Contextualised material

- AFAM guidelines are preliminary developed for Africans by Africans
- Focus on up-to-date first aid techniques and injury/disease prevention advice
- Content adapted to the context





- Put on gloves or cover your hands with clean plastic bags.
- Remove any clothing and jewellery, but only if these are not stuck to the skin.
- You can put cold liquid honey on the burn. This prevents infection and helps the wound to heal. Alternatively, you can also use aloe vera.

- Conditions are classified according to the most important signs for easy recognition
- + Instructions are simple
- Simple and clear drawings that are easy to copy
- Texts and African illustrations including youths, adults and elderly people from multiple ethnic and religious backgrounds
- In English, French, Portuguese & Swahili



Rinse out the eye straight away with preferably clean water. Do this for 10 - 15 minutes, from the nose outwards so that none of the liquid runs out from one eye into the other.



+ Make your own material

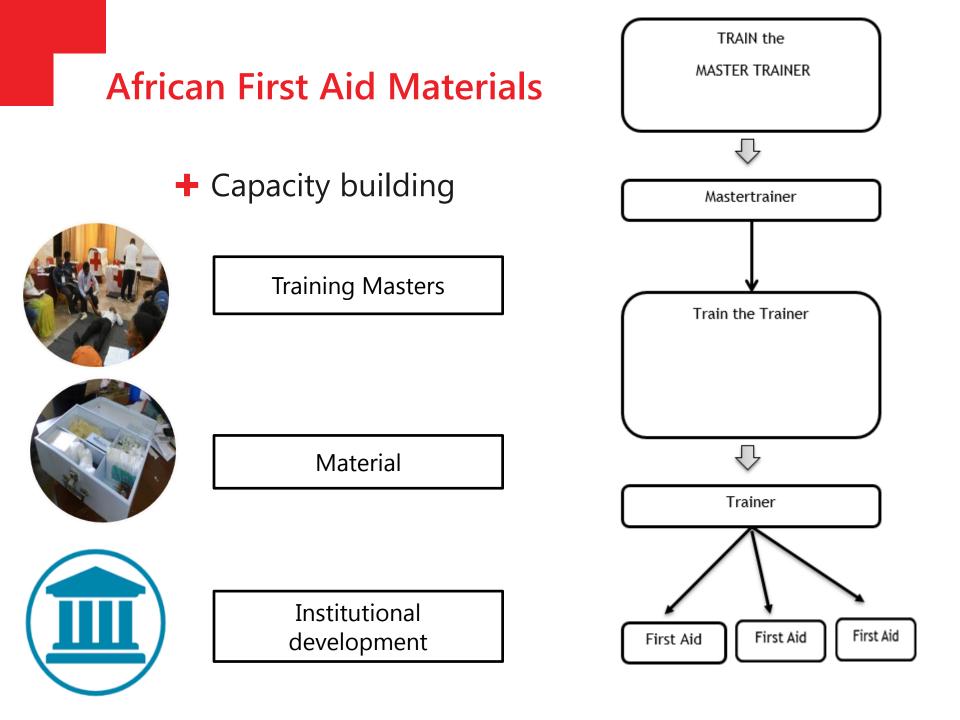


Develop your own first aid training materials with AFAM





Teaching skills/didactics = skill development





African First Aid Materials for children?





First aid educational materials for African children



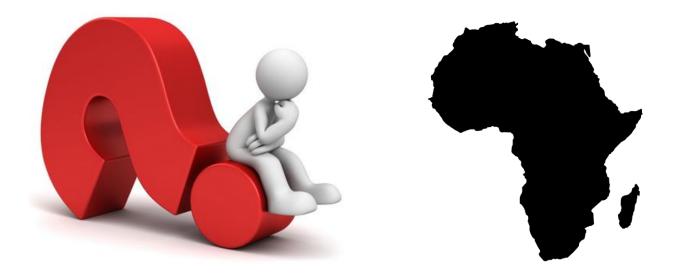


N

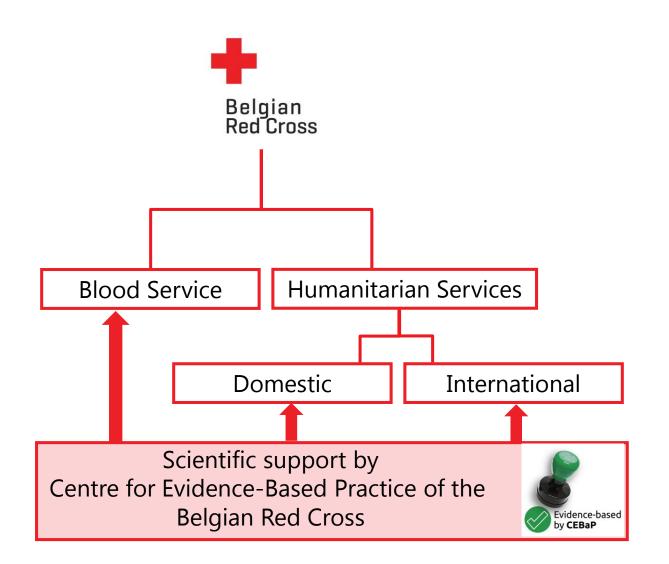
When Aerin Thomas learned CPR in class, she never imagined having to use the lessons just three months later on her father.

What?

- + Which first aid topics should be taught?
- + At what age?
- + Which educational methods are effective?
- + Which educational materials should be used?



Evidence-Based Practice in Belgian Red Cross

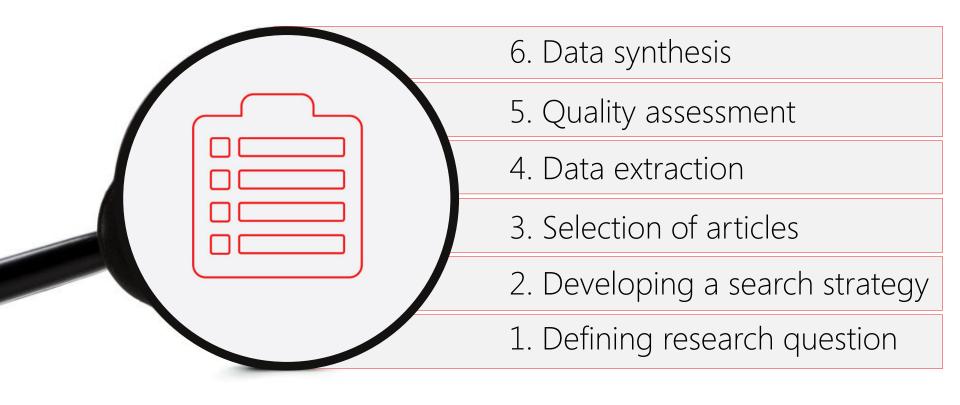


How?

Principle of Evidence-Based Practice



Best available scientific evidence



Question 1



At what age are children able to obtain a specific knowledge item, skill or attitude concerning a certain first aid topic?

First aid topics

- + General
- + Four main steps in first aid
- + Resuscitation
- + Choking
- + Skin wounds
- + Burns
- + Bleeding
- + Injuries to bones, muscles and joints
- + Poisoning







Studies included

57

Educational pathway in first aid

- Overview of objectives to be achieved throughout different educational levels (preschool, primary school, secondary school)
- Key concepts presented repeatedly throughout the curriculum, with deepening layers of complexity

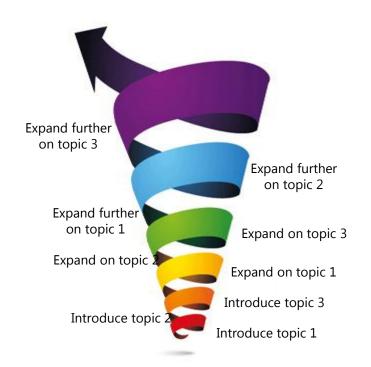




Educational pathway in first aid

+ Based on the spiral approach of learning:

- Basic facts of a subject are learned first, without worrying about the details
- As learning progresses, more and more details are introduced
- Focus on re-emphasis to help them enter into the long-term memory





Educational pathway on first aid

E = Encourage K = Know/Know How R = Repeat	5-б угѕ	7-8 угѕ	9-10 угs	11-12 угs	13-14 угs	15-16 угs	17-18 угs
BURNS							
Knowledge							
The children: • recognise a burn;	Е	К	R	R	R		
 know how to provide first aid for a burn (regardless of the degree of the burn); 	Е	К	R	R	R		
 know when to seek medical help for a burn; 			Е	K	R	R	R
 know the difference between a superficial, intermediate and deep burn; 				Е	К	R	R
 know what commonly causes burns (hot water, flames, fire); 	K	R	R	R			
Skills							
The children can: • correctly provide first aid for a burn;	E	к	R	R	R		
 seek medical help if the burn is serious. 				K	R	R	R
Attitudes							
See educational pathway General > Attitudes							
The children recognise the importance of: • continuously applying water to a burn.	E	к	R	R	R		

Age ranges



Objectives to be achieved at the level of knowledge, skills and attitudes

Educational pathway on first aid



E = Encourage K = Know/Know How R = Repeat	5-6 угs	7-8 угs	9-10 угs	11-12 угs	13-14 угs	15-16 угs	17-18 угs
BURNS							
Knowledge							
The children: • recognise a burn;	E	к	R	R	R		
 know how to provide first aid for a burn (regardless of the degree of the burn); 	E	к	R	R	R		
 know when to seek medical help for a burn; 		Ĭ	E	K	R	R	R
 know the difference between a superficial, intermediate and deep burn; 					K	R	R
 know what commonly causes burns (hot water, flames, fire); 	К		R				
Skills		↓					
The children can: • correctly provide first aid for a burn;	E	K	R	Ļ	R		
 seek medical help if the burn is serious. 				(K)	R	R	R
Attitudes							
See educational pathway General > Attitudes		↓					
The children recognise the importance of: • continuously applying water to a burn.	E	ĸ	R	R	R		

Question 2



Which educational interventions are effective?

Effective educational interventions

- 1. Provision of instructional materials (e.g. flipcharts, textbooks)
- 2. Use of alternative pedagogical methods (e.g. problem-solving method of teaching, cooperative teaching, constructivist teaching, guided inquiry teaching, small-group instruction)
- 3. Structured pedagogy interventions (structured lesson content + teacher training in delivering the new content + instructional materials for students and teachers)





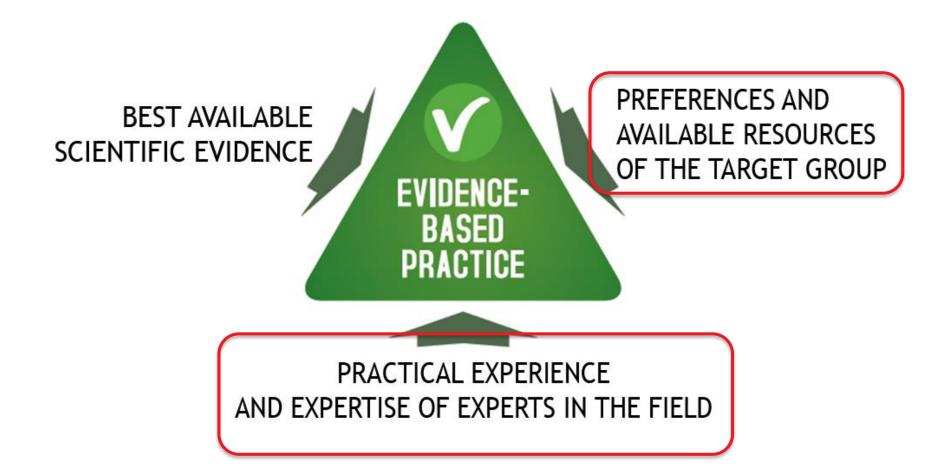




"information is not knowledge and data without context is just organized information."



Principle of Evidence-Based Practice



Practice experience & target group preferences





Expert panel meeting Johannesburg Nov 2017









Input experts: educational pathway - content

+ Additional topics:

- Stings and bites
- Fever (general knowledge)
- Diarrhoea (general knowledge)
- Fits (general knowledge)
- Disaster principles and risk awareness
- + Additional interventions:
 - Splinting
 - Plastic bags instead of gloves

Myth	Reality
Caused due to possession by evil spirits	It is a neurological disorder
Iron bars, keys, slippers, iron rods or burning skin with hot needle can stop attack	Antiepileptic drugs can control or prevent further seizures
Patients require treatment in asylum	Treatment by neurologists and physicians will suffice
Epileptic patients cannot marry	Epileptic patients can lead a normal married and sexual life
Patients should not bear children	Epileptic patients can have children with planned pregnancy and pre-conception counselling
Children with epilepsy require special schools	Some children may have coexistent mental retardation. Most have normal IQ and should be enrolled in regular schools

http://www.thehindu.com/todays-paper

Input experts: educational pathway - context

> Seeking help from a medical care provider

- Attained at a later age
- Keep repeating until 18 years of age

+ Hand washing

- Keep repeating until 18 years of age
- + Touching an unknown person
 - Objective removed due to possible unsafety for the child
- + Burns
 - Generally caused by fire and hot water; children should be aware of the danger at very young age



Educational pathway on first aid



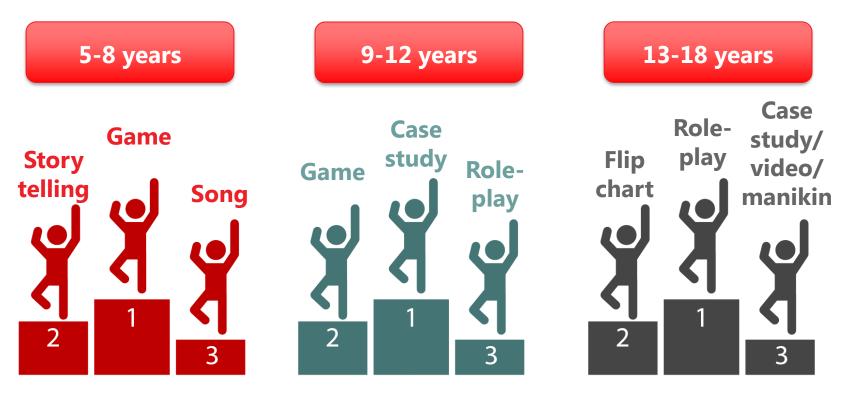
Input experts: educational methods





Input experts: educational materials





Current and future steps of the project

WORK IN PROGRESS





First aid educational materials for children aged 12-16 years

African experts: contextualize photographs & lay-out



Current and future steps of the project



+ Validation by expert panel

Meeting september



- + Pilot in Zimbabwe and Burundi
 - Train the trainer
 - Trainer teaches first aid to children
 → Impact on learning?
 - \rightarrow Usability of the materials?



+ By January 2019: materials available

Acknowledgements



<u>www.cebap.org</u>







@CEBaP_evidence





www.linkedin.com/company/centre-for-evidence-based-practice-cebap-

<u>International Cooperation Belgian Red Cross</u> An Vanderheyden – Delegate at Tanzania Red Cross





Acknowledgements: expert panel



Maël Rabemananjara Madagascar Red Cross Society, Madagascar

Golden Mukwecheni Zimbabwe Red Cross Society, Zimbabwe

Didier Dusabe Burundi Red Cross Society, Burundi

Elke Weyenbergh Belgian Red Cross-Flanders, Belgium

Heike Geduld (chair)

Education and Training, Emergency Medicine, Western Cape EMS, Division of Emergency Medicine, University of Cape Town and Stellenbosch University, South Africa

Wenceslas Nzabalirwa

School of Education, College of Education, University of Rwanda, Rwanda

Sarah Kiguli

Makerere University, Kampala, Uganda

Beatrice Musindo

VVOB (Flemish Association for Development Cooperation and Technical Assistance), Harare, Zimbabwe

Wayne Smith

Emergency Medicine Cape Town, Cape Town, South Africa

Rosalie Bikorindagara

Institut de pédagogie appliquée, Université du Burundi, Bujumbura, Burundi

Henriette Ramanambelina

Ecole Normale Supérieure de l'Université d'Antananarivo, Madagascar

Challenges

Introducing First Aid in school curricula

+ Flanders, Belgium

- First aid is introduced in the curriculum with clearly defined competences to be achieved at the end of secundary school
- The curriculum is guided by the educational pathway
- Training of school teachers



Challenges

Introducing First Aid in school curricula

+ Zimbabwe

- Disaster Risk Management training in schools recently included in the new curriculum of the Ministry of Primary and Secondary Education
- Zimbabwe Red Cross Society started training the schoolteachers in First Aid





Discussion: Introducing First Aid in school curricula

- 1. Good practices for introducing First Aid into the school curriculum?
- 2. Education & Health: what are your experiences in the field?

