

# Impact of a guideline update on recommendations and didactic material: the example of AFAM (African First Aid Materials)

Jorien Laermans<sup>1</sup>, Vere Borra<sup>1</sup>, Bert Avau<sup>1,2</sup>, Hans Van Remoortel<sup>1</sup>, Axel Vande veegaete<sup>1</sup>, Emmy De Buck<sup>1,3</sup>, Philippe Vandekerckhove<sup>3,4,5</sup>

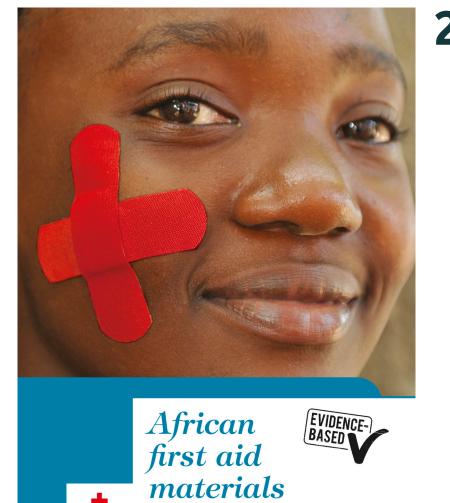
1 Centre for Evidence-Based Practice, Belgian Red Cross, Mechelen, Belgium, 2 Cochrane Belgium, Centre for Evidence-Based Medicine (Cebam), Leuven, Belgium, 3 Department of Public Health and Primary Care, Faculty of Medicine, KU Leuven, Leuven, Belgium, 4 Belgian Red Cross, Mechelen, Belgium, 5 Faculty of Medicine and Health Sciences, Ghent University, Ghent, Belgium

## Background

In 2011, Belgian Red Cross developed first aid and prevention guidelines adapted to the Sub-Saharan African context, according to the principles of Evidence-Based Practice. These guidelines were brought together into the African First Aid Materials (AFAM). In 2016, the AFAM guidelines were updated, taking into account the latest scientific evidence, expert opinions and target group preferences, and using a vastly improved methodology.

# Objectives

To assess the impact of this update on the AFAM recommendations and didactic materials.



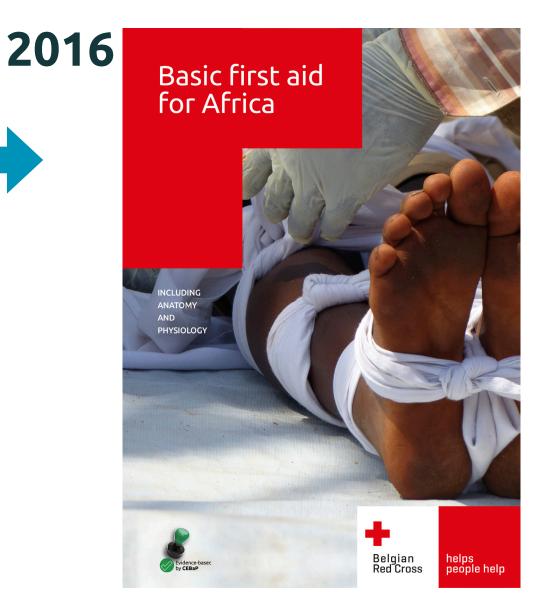


Changes in:

Methodology

Scientific evidenceExpert opinion

Target group preferences

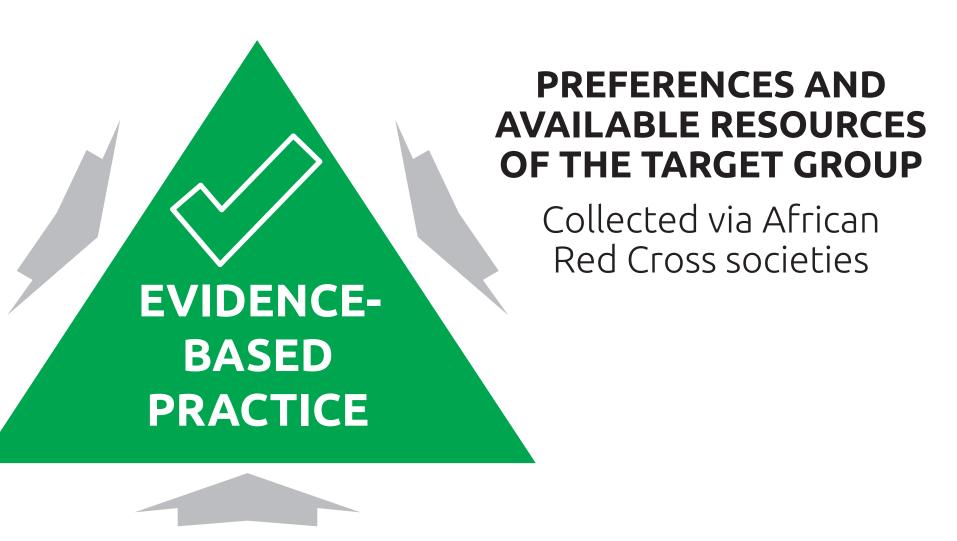


## Methods

BEST AVAILABLE SCIENTIFIC EVIDENCE

# included studies were compared between 2011 and 2016

Evidence-based by **CEBaP** 



# PRACTICAL EXPERIENCE AND EXPERTISE OF EXPERTS IN THE FIELD

Gathered during an online meeting of a multidisciplinary African expert panel

## Results

### 1. Methodological improvements

2011: **27** questions and search strategies, at the level of the injury e.g. "Which intervention should be used in the first aid management of burns?"

2016: **114** PICO questions and search strategies, at the level of the intervention, of which **50** with interventions specific to the African context

e.g. "In people with burns (P), is treating the burn with honey (I), compared to alternative treatment options (C), effective for survival, functional recovery, pain, complications, time to resumption of usual activity, restoration to the pre-exposure condition, time to resolution of the symptoms (O)?"





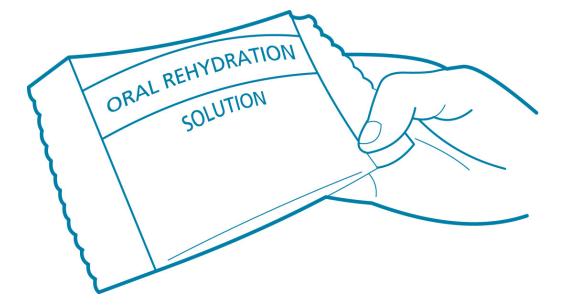
#### 2. Scientific evidence

- From 248 to 295 included studies
- Changes in 9 recommendations:
  - 8 new recommendations
  - 1 Good Practice Point (GPP) became a weak recommendation

#### NEW

#### e.g. Zinc-fortified ORS for treatment of diarrhoea

- 2011: "Try to obtain zinc tablets. This will help to fight the diarrhoea."
- 2016: Evidence of moderate quality in favour of zincfortified WHO ORS.



Statistically significant decrease in

- mean diarrhoea frequency
- hospitalisation duration
- mean diarrhoea duration
- duration of diarrhoea less than 4 days compared to standard WHO ORS.



## FROM GPP TO WEAK RECOMMENDATION

#### Fire safety education for prevention of burns

- 2011: "Teach children about household objects that can burn them and about the danger of fire."
- 2016: Limited evidence of low quality in favour of safety education.
   Statistically significant increase in
  - safe hot water temperature
  - installation of fire guards
  - having a fire escape plan compared to no safety education.

## 3. Expert opinion

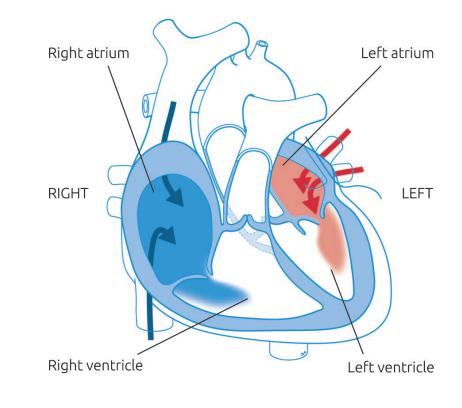
Changes in 4 recommendations

#### e.g. Vaseline for treatment of burns

- 2011: "Do not use vaseline for burns. Vaseline is not sterile and can cause infection."
- **2**016:
  - Limited evidence of moderate quality in favour of vaseline
  - Expert panel:
    - Evidence compares vaseline with silver sulfadiazine
    - Vaseline and silver sulfadiazine mask the wound, making it difficult for a medical doctor to judge
      - Sentence about the use of vaseline is left out

#### 4. Target group preferences

- Additional chapter on anatomy and physiology
- Additional background information on psychosocial first aid, malaria, cholera and measles



# Conclusions

- Methodological improvements have led to more sensitive searches of evidence and identification of additional relevant evidence.
- Updating the AFAM guidelines has exposed new scientific evidence, fine-tuned expert opinions and revealed new target group preferences. A five-year update of evidence-based guidelines is therefore worthwhile and warranted.
- In run-up to the next update, the systematic collection of feedback from the target group should receive more attention.





