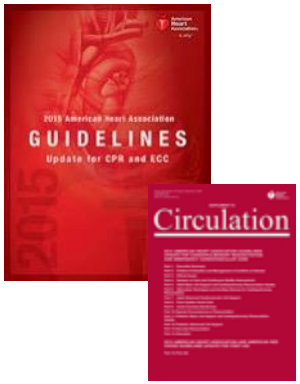
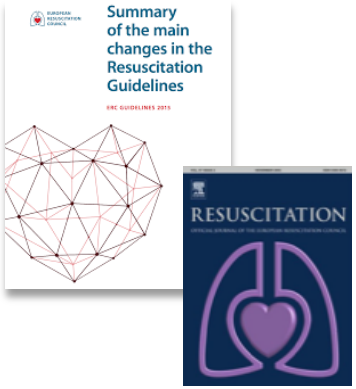
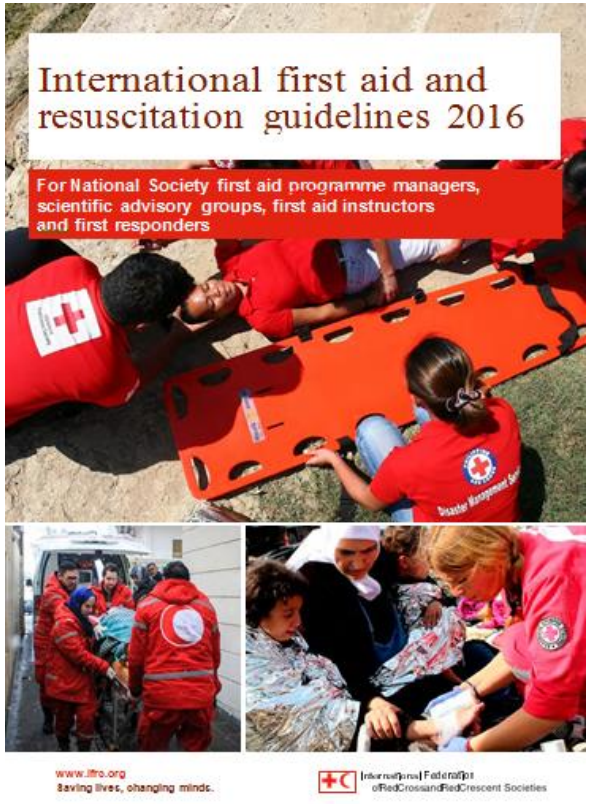
Erste Hilfe Guidelines

Susanne Schunder-Tatzber

EBM → **Praxis**







Von eminence-based zu evidence-based...

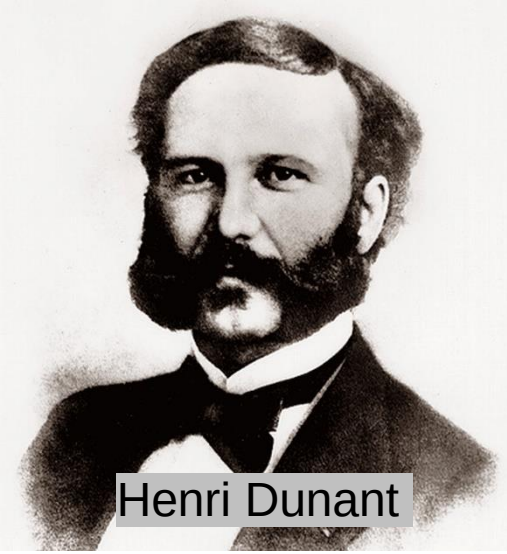
Consensus-based guidelines → Evidence-based guidelines

Der Beginn: Schlacht von Solferino - 24. Juni 1859

- 45.000 Soldaten gefallen, verwundet oder „vermisst“
- 25.000 Verwundete ohne organisierte med. Versorgung

(D-Day: 6.6. 1944
21.000 Soldaten gefallen, verwundet oder „vermisst“
15.000 Verwundete ohne organisierte med. Versorgung)

Der Beginn....


Henri Dunant

- „tutti frattelli“
- „Eine Erinnerungen an Solferino“ (1862) führte zur Gründung der Rot-Kreuz Bewegung
- er forderte gleichzeitig eine entsprechende Ausbildung:

„So braucht man also freiwilliger Wärter und Wärterinnen die im voraus ausgebildet, geschickt und mit ihrer Aufgabe vertraut sind, …“

IFRC

- IFRC ist die weltweit größte humanitäre Organisation
- bietet Hilfe unabhängig von Nationalität, Rasse und religiösen Wertvorstellungen.
- 190 nationale Gesellschaften als Mitglieder

SAVE LIVES, PROTECT
LIVELIHOODS, AND
STRENGTHEN RECOVERY
FROM DISASTERS AND CRISES

Preparing and responding
to disasters and crises

International
Federation of Red
Cross and Red
Crescent Societies

Katastrophen-übung 1980

Papstbesuch 1982

Arbeitsmedizin 1995

Anhang 4.

Erlaß des k. k. Ministeriums des Innern vom 31. März 1858, Z. 3617. (Erlaß der k. k. niederösterreichischen Statthalterei vom 23. Mai 1858, Z. 16948.)

Anleitung für Nichtärzte zur Wiederbelebung der Scheintodten und zur ersten Hilfeleistung bei plötzlichen Lebensgefahren.

Beim Scheintode, bei plötzlicher Lebensgefahr und in allen ähnlichen Vorfällen ist vor Allem dafür zu sorgen, daß:

a) Der Verunglückte mit Vorsicht auf einen Ort, wo die Wiederbelebungs- und Rettungsversuche bequem und vollständig vorgenommen werden können und unter Verhältnisse gebracht werde, wodurch derselbe nicht nur allgemein bekannten, sondern auch insbesondere jenen schädlichen Einflüssen entzogen wird, welche die vorhandene Lebensgefahr herbeigeführt haben;

b) daß zugleich und so schleunig als möglich ein Arzt herbeigeholt und von dem Vorfalle so weit unterrichtet werde, um die nöthigen Rettungsmittel mitnehmen zu können;

c) daß der Verunglückte von allen Kleidungsstücken, Bändern, Tüchern u. s. w. befreit werde, welche seinen Körper drücken, einschnüren oder pressen.

I. Behandlung der Erfrornen.

1. Erfrorne sind mittelst eines Schlittens, Wagens oder einer Trage auf einem Lager von Schnee, Stroh, Heu oder Häckerling mit der Vorsicht an den Rettungsort zu bringen, daß die durch die Kälte spröde gewordenen Ohren, Lippen, Finger, Nase u. s. w. nicht abgebrochen werden.

2. Der für die Wiederbelebungsversuche bestimmte Ort darf nicht geheizt, aber auch nicht dem Luftzuge ausgesetzt sein.

Es eignet sich hierzu eine Kammer, Scheune, ein Gewölbe oder Vorhaus.

Die ersten Leitlinien in der Wiederbelebung & EH

- 60ziger Jahren des 20. Jahrhundert: erste Leitlinien für die Wiederbelebung – American Heart Association
- 2000 erster „Consensus of Science Prozess“ der ILCOR (International Liason Committee of Resuscitation)
- 2005 wurden auch erstmals einige über die Bereiche der Wiederbelebung hinausgehende Fragen bearbeitet.

FAEEN

1994 haben Verantwortliche für die Erste Hilfe Ausbildung von 10 Europäischen Nationalen Rot-Kreuz und Rot-Halbmond Gesellschaften begonnen ein Netzwerk (European Red Cross Red Crescent First Aid Education Network) für Erste Hilfe Ausbildung zu entwickeln.

Österreichische Akademie
für Arbeitsmedizin und Prävention

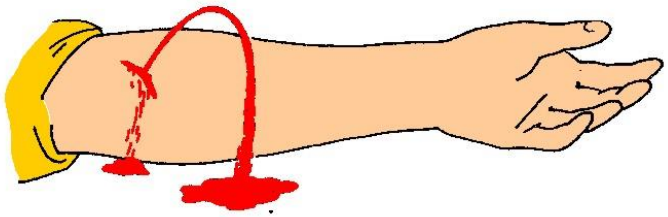
Umfrage
Europ. Netzwerk für EH Ausbildung - FAEEN
„Erste Hilfe bei akuten Blutungen“
2003

Ausgefüllte Fragebögen

- American RC
- Andorra RC
- Austrian RC
- Belgium RC/Flanders
- Croatian RC
- Czech RC
- Danish RC
- Estonian RC
- French RC
- Finish RC
- German RC
- Islandic RC
- Lithuanian RC
- Monegasse RC
- Netherland RC (Orange RC)
- Norway
- Slovakian RC
- Swiss RC (Samaritans)

Wie definiert Ihre NS „akute Blutungen“?

- 4 x Blut, das aus der Wunde spritzt oder nicht leicht kontrolliert werden kann
- 4 x Patient entwickelt Zeichen eines Schocks
- 2 x Blut sickert aus Verbände
- 2 x lebensbedrohliche Blutung
- 2 NS verwenden keine Definition



Was ist die Reihenfolge der EH -Maßnahmen, die Ihre NS im Falle von Blutungen an Gliedmaßen lehrt?

Viele - leicht - verschiedene Techniken wurden verwendet:

- Erhöhung der Gliedmaße
- direkter Druck auf die blutende Wunde
- Prävention eines Schocks - legen Sie sich hin, ...
- sich um die Infektion kümmern
  - (Handschuhe, ..)
- Notruf
- Psychologische Unterstützung

Lehren Sie Ersthelfer eine Abbindung an Gliedmaßen zu benutzen?

7 NS lehrten damals die Verwendung der Abbindung im Erste Hilfe Grundkurs **nicht**:

- Amcross
- Österreich,
- Belgien,
- Dänemark,
- Deutschland,
- Island,
- Niederlande

Unter welche Umständen lehren Sie Ersthelfer eine Abbindung an Gliedmaßen durchzuführen?

NS, die Abbindungen lehrten, empfahlen:

- 7 x es als die letzte Möglichkeit, die Blutung zu kontrollieren
- 6 x es, wenn es sich um eine Amputation handelt
- 3 x es provisorisch - viele Verletzte, nur ein Ersthelfer
- 2 x es, wenn kein direkter Druck möglich sei (offener Bruch, für direkten Druck unzugänglich, Fremdkörper,..)

Welche Materialien sollten für eine Abbindung verwendet werden?

- 3x dreieckige Bandage
- 3 x Gummi (St. Martinsbinde),
- 2 x Schal, mindestens 5cm
- 3 x Gürtel und / oder Krawatte
- starke Bandage
- was auch immer geeignet ist
- elastischer fester Stoff

Evidenz

In den meisten NS waren 2003 die Ideen der Evidenzbasierten Medizin (EBM) noch nicht zu einem täglichen Teil der Arbeit geworden - sie konnten von einem medizinischen Gremium in Betracht gezogen werden, aber in den meisten NS gab es keine systematischen Methoden zur Sammlung von Informationen, welche Techniken gelehrt wurden.

	European Working Group on First Aid Education **Reference Centre of First Aid Education**

SERVERE BLEEDING MANAGEMENT

Analysis of First Aid Techniques in National Societies

and

Literature Review

Report Version: 2

Report Preparation Date: 2004 01 22

	This survey and report was funded by the Austrian Red Cross Susanne Schunder-Tatzber MD, MAS, MBA

„Europäische Erste Hilfe Guidelines“

- EU gefördertes Projekt - 2005
- Federführung: Belgisches/Flanders Rotes Kreuz
- Ersten Hilfe & EbM
- Erstmals auch Fragen der Didaktik bearbeitet
- Das Ergebnis wurde 2007 in der Zeitschrift „Resuscitation“ veröffentlicht.

ELSEVIER

RESUSCITATION

www.elsevier.com/locate/resuscitation

TRAINING AND EDUCATIONAL PAPER

European first aid guidelines☆,☆☆

Stijn Van de Velde*, Paul Broos, Marc Van Bouwelen, Rudy De Win, An Sermon, Johann Verduyckt, André Van Tichelen, Door Lauwaert, Barbara Vantroyen, Christina Tobback, Patrick Van den Steene, Sarmite Villere, Carlos Urkia Mieres, Gabor Göbl, Susanne Schunder, Koenraad Monsieurs, Joost Bierens, Pascal Cassan, Enrico Davoli, Marc Sabbe, Grace Lo, Maaike De Vries, Bert Aertgeerts,

on behalf of the European First Aid Manual project by the Belgian Red Cross-Flanders

Training Department, Belgian Red Cross-Flanders, Motstraat 40, 2800 Mechelen, Belgium

Received 26 August 2006; received in revised form 20 October 2006; accepted 20 October 2006

KEYWORDS
Emergency treatment;
Evidence-based medicine;
First aid;
Guidelines;
Training

Summary
Aim: Our objectives were to determine the most effective, safe, and feasible first aid (FA) techniques and procedures, and to formulate valid recommendations for training. We focussed on emergencies involving few casualties, where emergency medical services or healthcare professionals are not immediately present at the scene, but are available within a short space of time. Due to time and resource constraints, we limited ourselves to safety, emergency removal, psychosocial FA, traumatology, and poisoning. Cardiopulmonary resuscitation (CPR) was not included because guidelines are already available from the European Resuscitation Council (ERC). The FA guidelines are intended to provide guidance to authors of FA handbooks and those responsible for FA programmes. These guidelines, together with the ERC resuscitation guidelines, will be integrated into a European FA Reference Guide and a European FA Manual.

„National First Aid Science Advisory Board”

- American Heart Association (AHA) & AmCross
- Ziel: verfügbare wissenschaftliche Literatur zum Thema „Erste Hilfe“ zu sichten und zu evaluieren
- Vorarbeiten für den Prozess des „Consensus on Science & Treatment Recommendation 2005” zu leisten.

First Aid Policy 2007

Policy

FIRST AID POLICY

Introduction

Today Red Cross and Red Crescent Societies are the major first aid provider in the world.[1] This started at Solferino when first aid was given to the wounded soldiers, the sick and injured without discrimination. In the 21st century, the International Federation of Red Cross and Red Crescent Societies (International Federation) reaffirms its commitment to first aid within the changing context of global health.

The Mission of the International Federation is to improve the lives of vulnerable people by mobilizing the power of humanity. [2]

The Goals of the Federation's Global Agenda established in 2006 are:

Goal 1: To reduce the number of deaths, injuries and impact from disasters.

Goal 2: To reduce the number of deaths, injuries and impact from diseases and public health emergencies.

Goal 3: To increase local community, civil society and Red Cross Red Crescent capacity to address the most urgent situations of vulnerability.

Goal 4: To promote respect for diversity and human dignity and reduce intolerance, discrimination and social exclusion.

“International First Aid Science Advisory Board”

- 2008 Einladung an IFRC weitere Mitglieder zu nominieren
- Unter der Federführung des „Europäischen Referenzzentrums für Erste Hilfe Ausbildung nahmen 9 KollegInnen aus aller Welt an der Erstellung des „Consensus of Science 2010“ teil.

WORKSHEET for Evidence-Based Review of Science for Emergency Cardiac Care

Worksheet author(s)

Susanne Schunder-Tatzber	**Date Submitted for review:** March 28th 2010

Clinical question.

When direct pressure fails to stop bleeding does the administration of a tourniquet improve outcome?

Is this question addressing an intervention/therapy, prognosis or diagnosis? Intervention
State if this is a proposed new topic or revision of existing worksheet: Review of 2005 worksheet

Conflict of interest specific to this question

Do any of the authors listed above have conflict of interest disclosures relevant to this worksheet?
- Susanne Schunder-Tatzber has no intellectual or financial conflicts of interest.

Search strategy (including electronic databases searched).

Medline: MESH words **tourniquets** and text word **Trauma**, tourniquets and hemorrhage, tourniquet and emergency, tourniquets and First Aid , tourniquet and pre hospital, tourniquet and adverse effects; extremity bleeding and stop bleeding , Fist Aid and stop bleeding, limb bleeding and stop bleeding, severe bleeding and stop bleeding , hemorrhage & wounds & First Aid, hemorrhage & wounds and pre hospital, compression bandage, pressure bandage & control bleeding, severe extremity hemorrhage & control bleeding, hemorrhage & pressure dressing ,

MEDLINE -Current (1970 - Current)
All EBM Reviews – Cochrane Library (Cochrane Database of Systematic Reviews (CDSR)
Review of the European First Aid Guidelines
Relevant article were also searched for other citations and via hand search

• State inclusion and exclusion criteria

Training text without scientific evidence, overview on history on the application of tourniquets were excluded.
Reviews and Metaanalysis were included.

• Number of articles/sources meeting criteria for further review:
52 articles were reviewed, 32 taken into closer consideration for the citation list and 22 finally cited – studies on types of tourniquet devices and papers not directly relevant to the First Aid setting (mainly tourniquets in surgical setting) were excluded in the final version.

Circulation
JOURNAL OF THE AMERICAN HEART ASSOCIATION

American Heart Association®
Learn and Live℠

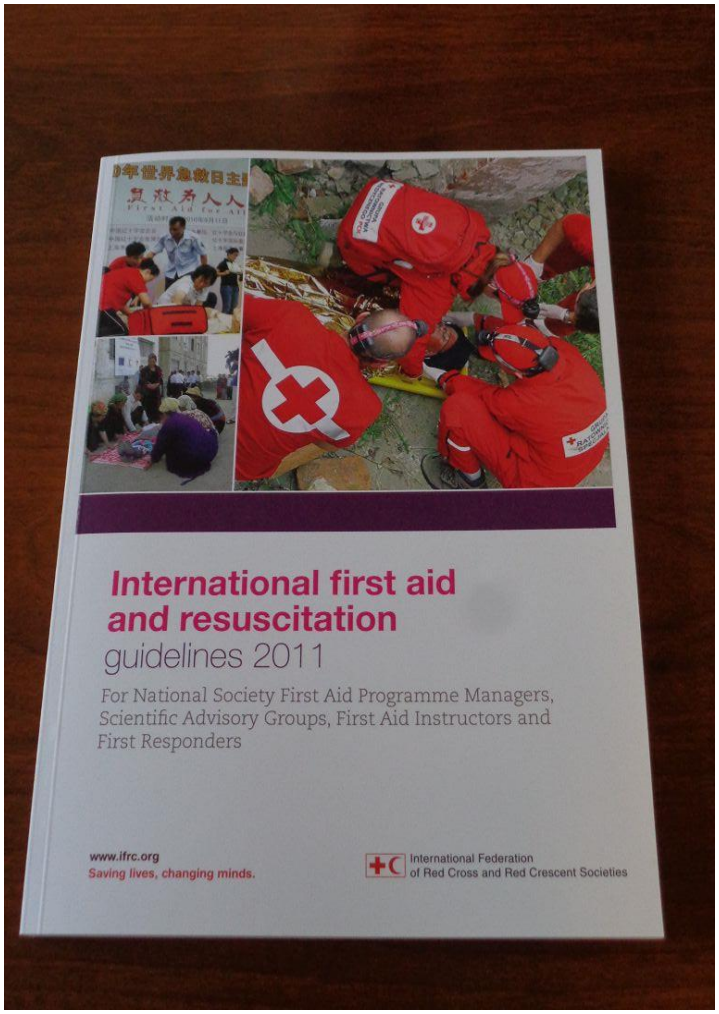
Part 13: First Aid: 2010 American Heart Association and American Red Cross International Consensus on First Aid Science With Treatment Recommendations

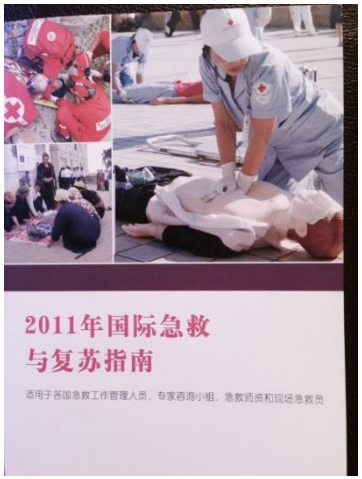
David Markenson, Jeffrey D. Ferguson, Leon Chameides, Pascal Cassan, Kin-Lai Chung, Jonathan L. Epstein, Louis Gonzales, Mary Fran Hazinski, Rita Ann Herrington, Jeffrey L. Pellegrino, Norda Ratcliff, Adam J. Singer and First Aid Chapter Collaborators

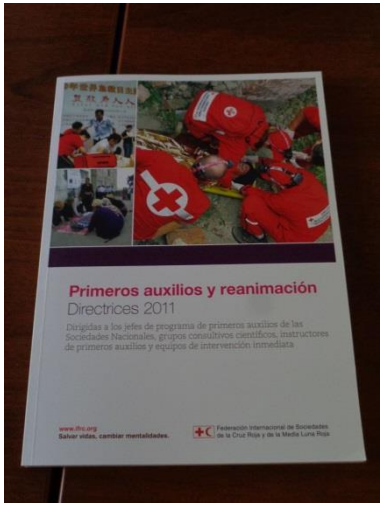
Circulation 2010;122;S582-S605
DOI: 10.1161/CIRCULATIONAHA.110.971168
Circulation is published by the American Heart Association. 7272 Greenville Avenue, Dallas, TX 72514
 Print ISSN: 0009-7322. Online ISSN: 1524-4539

The online version of this article, along with updated information and services, is located on the World Wide Web at:
http://circ.ahajournals.org/cgi/content/full/122/16_suppl_2/S582

Int. First Aid & Resuscitation Guideline 2011

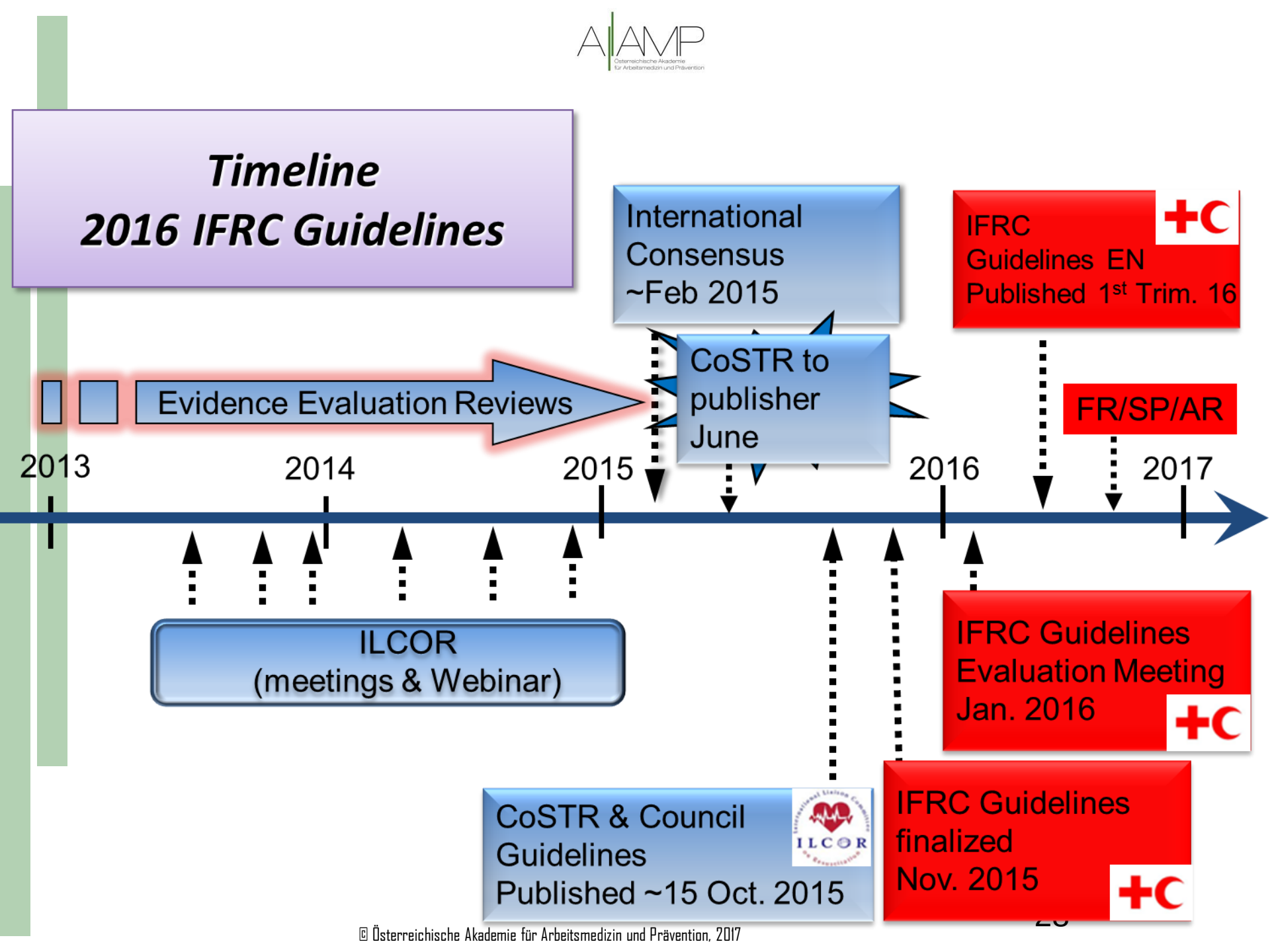






European First Aid Certificate

EU Red Cross NS demonstrated that their FA-courses fit to these regulations, and these NS are entiteld to add a stemp ”In accordance with European Red Cross Standards on First Aid” on their NS First Aid Certificates.



Entwicklung der evidence-based Guidelines

Sammeln der besten scientific evidences:

1. Forschungsfrage formulieren
2. Untersuchungsmethode überlegen
3. Wissenschaftliche Datenbanken durchsuchen
4. Evidenz auswahl, Daten extrahieren und Synthese der Daten
5. Qualitative Bewertung der Studien

Praktische Erfahrungen und Präferenzen der Zielgruppe:

6. Empfehlungen basierend auf Evidenz, (praktische) Erfahrung von Experten und Präferenzen der Zielgruppe
7. Richtlinie zur Kontextualisierung und Validation
8. Formulierung der finalen Empfehlungen

Entwicklung der 2016 IFRC Erste Hilfe Richtlinien

Verschiedene Quellen der Evidenz:

- ILCOR
- Zentrum für Evidenz-basierende Praxis (CEBaP) Beligsches Rote Kreuz
- Wissenschaftliches Beratergremium des Amerikanischen Roten Kreuzes
- Evidenz Zusammenfassungen von RK Evidenz-basierenden Netzwerk

Praktische Erfahrungen und Präferenzen der Zielgruppe:

- Rote Kreuz & Roter Halbmond NS involviert
- Meetings um Empfehlungen zu diskutieren & Endredaktion

Methodologie 2015

GRADE (Grading of Recommendations Assessment, Development and Evaluation)

- Systems zur Qualitätsbewertung der Evidenz von Studien und die Auswirkung dieser Qualität auf die Stärke der Empfehlung (Grading the evidence)
- eigens entwickelte Software zur Bearbeitung

Example of a GRADE assessment

Author(s): Jan Jensen, Michael Reilly, David Markenson
Date: October 22, 2014
Question: Should application of tourniquet vs. not applying tourniquet be used for external limb bleeding in adults and children?

11 studies included

Quality assessment							№ of patients		Effect		Quality	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	application of tourniquet	not applying tourniquet	Relative (95% CI)	Absolute (95% CI)		
Hemostasis (success of termination blood flow assessed with: sustained elimination of distal pulse)												
1	observational study ***with comparison group*** (Beekley 2008)	serious [5]	not serious	not serious	not serious	all plausible residual confounding would reduce the demonstrated effect	35/42 (83.3%)	17/28 (60.7%)	**RR 10.54** (6.55 to 16.96)	5792 more per 1000 (from 3370 more to 9690 more)	⊕⊕◯◯ LOW	CRITICAL
								0%		0 fewer per 1000 (from 0 fewer to 0 fewer)		
Hemostasis (success of termination blood flow assessed with: sustained elimination of distal pulse)												

Contents lists available at ScienceDirect

Resuscitation

journal homepage: www.elsevier.com/locate/resuscitation

European Resuscitation Council Guidelines for Resuscitation 2015 Section 9. First aid

David A. Zideman[a,*], Emmy D.J. De Buck[b], Eunice M. Singletary[c], Pascal Cassan[d], Athanasios F. Chalkias[e,f], Thomas R. Evans[g], Christina M. Hafner[h], Anthony J. Handley[i], Daniel Meyran[j], Susanne Schunder-Tatzber[k], Philippe G. Vandekerckhove[l,m,n]

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[k] Austrian Red Cross, National Training Center, Vienna, Austria
[l] Belgian Red Cross-Flanders, Mechelen, Belgium
[m] Department of Public Health and Primary Care, Faculty of Medicine, Catholic University of Leuven, Leuven, Belgium
[n] Faculty of Medicine, University of Ghent, Ghent, Belgium

Introduction

In 2005, the American Heart Association (AHA) together with the American Red Cross (ARC) formed the National First Aid Science Advisory Board to evaluate the science associated with the practice of First Aid and published the 2005 AHA and ARC Guidelines for First Aid. This advisory board was subsequently expanded to include representatives from several international first aid organizations to become the International First Aid Science Advisory Board (IFASAB). IFASAB evaluated the scientific literature of first aid and published the treatment recommendations for 2010 in association with the International Liaison Committee on Resuscitation (ILCOR) resuscitation recommendations.[1,2]

It was not until 2012 that ILCOR convened a full international First Aid Task Force with representation from all constituent International Councils together with the ARC. The ERC contributed directly to the Task Force as individual members, question owners and by providing expert evidence reviewers. By the ILCOR Consensus Conference in early 2015 the Task Force had completed comprehensive reviews of twenty-two questions using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) methodology in combination with ILCOR's Scientific Evidence Evaluation and Review system (SEERS). Seventeen of these questions were derived from the 2010 AHA and ARC consensus document, the remaining five questions were new topics selected by the First Aid Task Force and based on current medical requirements. All 22 questions were devised in a Population Intervention Comparison Outcome (PICO) format and librarians assisted in developing the search strategies so that the science could be reassessed at regular intervals throughout the process and into the future using the same search criteria.

In publishing these guidelines based on the 2015 Consensus on Science and Treatment Recommendations the ERC recognises that this is not a comprehensive review of all First Aid topics. The twenty-two questions reviewed in this section provide important evidence-based support for current first aid practice or changes from current practice. It is hoped that the search strategies that have been developed will be used to access newly published research. The Task Force will continue by re-examining the remaining 30 topics reviewed in 2010 and develop new questions based on current and evolving medical practice.

GRADE and First Aid

GRADE is a standardised and transparent process for the evaluation of scientific data. For the 2015 Consensus on Science ILCOR combined GRADE with the development of PICO search strings and its own SEERS system. The process contained over 50 planned steps and involved the selection of a PICO question, the development of an appropriate search string for interrogating the science databases, the analysis of the searched publications to select those relevant to the PICOs, the analysis of the individually selected papers for risk of bias and quality indicators across selected outcomes, analysis of the results of the science, and insertion of

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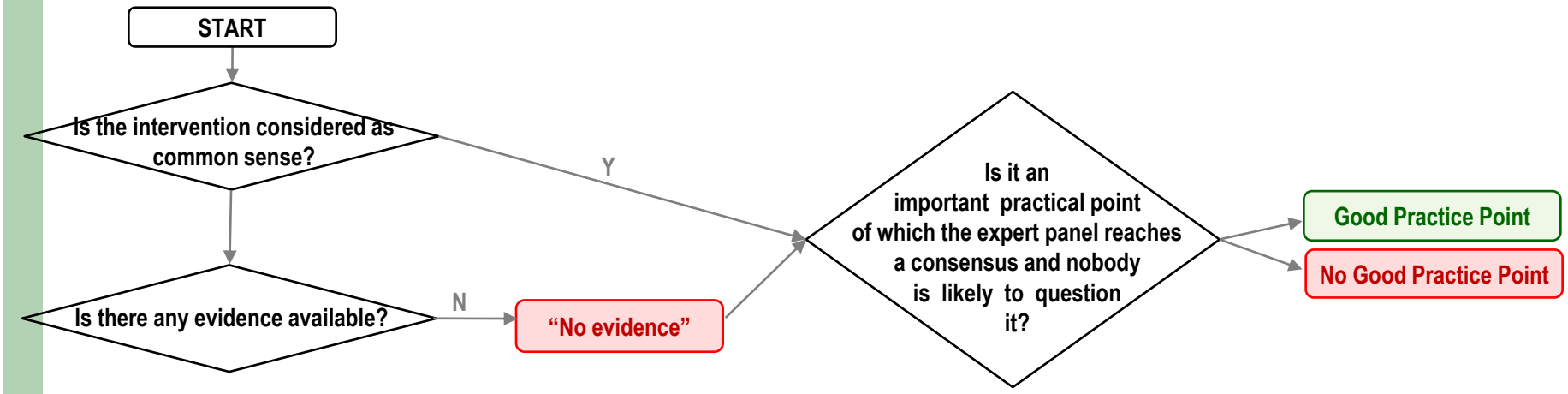
http://dx.doi.org/10.1016/j.resuscitation.2015.07.031
0300-9572/

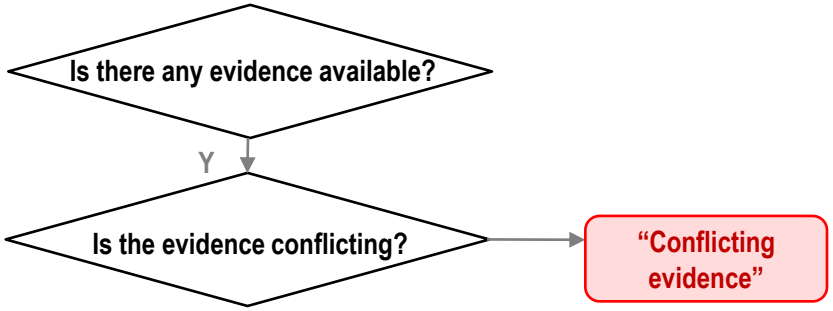
How to go from evidence to recommendations

No evidence found → formulate Good Practice



How to go from evidence to recommendations

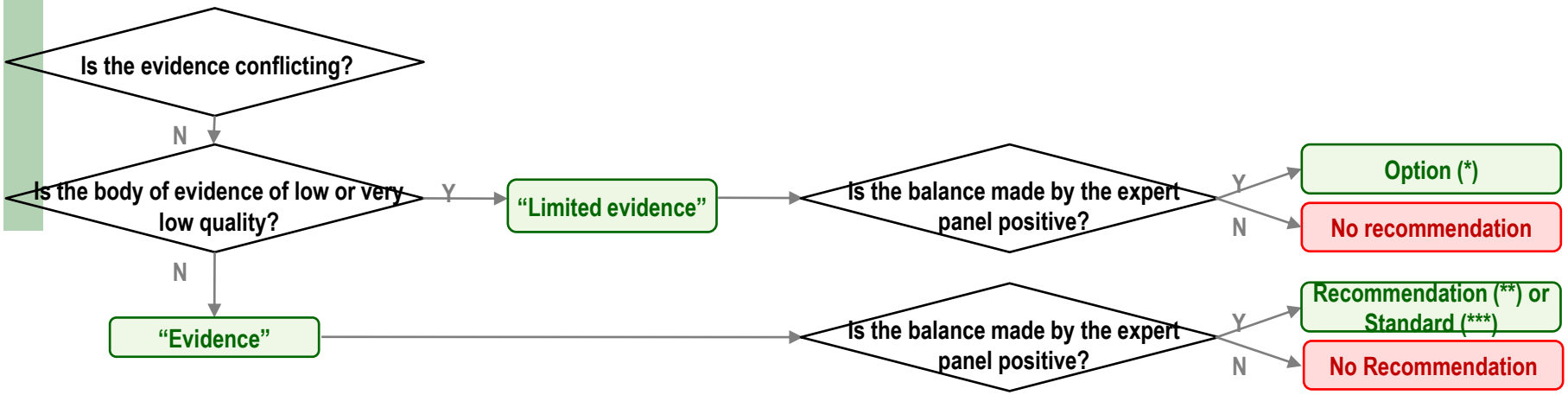
Inconsistent evidence → Do not formulate a recommendation



How to go from evidence to recommendations

Consistent evidence → formulate recommendation (**) or option (*), depending on the quality of the evidence; take into account:

- ✓ Benefits and harms
- ✓ Quality of evidence
- ✓ Preferences of the target group



HYPOGLYCEMIA

Evidence	Guidelines	
223 patients treated with glucose tablets (15-20g) showed a benefit with glucose tablets, with lower resolution of symptoms 15 minutes after treatment for diabetic patients treated with dietary sugars compared to glucose tablets. *Slama, 1990, 589; Husband, 2010, 154; McTavish, 2011, 381*	Glucose tablets (15-20 g) should be used by first aid providers for treating symptomatic hypoglycemia in conscious individuals	***
Low quality evidence, with pooled data from 485 diabetic patients treated with dietary sugars. *Slama, 1990, 589; Husband, 2010, 154; McTavish, 2011, 381*	If glucose tablets are not available, various forms of dietary sugars such as SkittlesTM, MentosTM, sugar cubes, jellybeans and orange juice can be used to treat symptomatic hypoglycemia in conscious individuals	**

Dietary sugars versus glucose tablets for first-aid treatment of symptomatic hypoglycaemia in awake patients with diabetes: a systematic review and meta-analysis

Jestin N Carlson,[1,2] Susanne Schunder-Tatzber,[3] Christine J Neilson,[4] Natalie Hood[5]

► Additional material is published online only. To view please visit the journal online (http://dx.doi.org/10.1136/emermed-2015-205637).

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[2]Department of Emergency Medicine, University of Pittsburgh, Pittsburgh, Pennsylvania, USA
[3]National Training Center, Austrian Red Cross, Vienna, AT, Austria
[4]Li Ka Shing International Healthcare Education Centre at St Michael's Hospital, Toronto, Canada
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Received 14 December 2015
Revised 6 July 2016
Accepted 20 August 2016
Published Online First 19 September 2016

ABSTRACT

Background While glucose tablets have been advocated for treating symptomatic hypoglycaemia in awake patients, dietary sugars may be more convenient. We performed a systematic review to compare the impact of these treatment options on the relief of symptomatic hypoglycaemia, time to resolution of symptoms, blood glucose levels, complications and hospital length of stay.

Method We searched PubMed, Embase and the Cochrane Library through 28 June 2016 and assessed the quality of evidence using the Grades of Recommendation, Assessment, Development and Evaluation approach. Reference lists from a subset of the resulting articles were mined for additional, potentially eligible papers. We calculated the risk ratio (RR) of each treatment option for the preselected outcomes of interest.

Results Of the 1774 identified papers, four studies met the inclusion criteria; three randomised controlled trials totalling 502 hypoglycaemic events treated with dietary sugars and 223 with glucose tablets and one observational study with 13 events treated with dietary sugars and 9 with glucose tablets. The dietary forms of sugar included sucrose, fructose, orange juice, jelly beans, Mentos, cornstarch hydrolysate, Skittles and milk. In the pooled analysis, patients treated with dietary sugars had a lower resolution of symptoms 15 min after treatment compared with glucose tablets (RR 0.89, 95% CI 0.83 to 0.95).

Conclusions When compared with dietary sugars, glucose tablets result in a higher rate of relief of symptomatic hypoglycaemia 15 min after ingestion and should be considered first, if available, when treating symptomatic hypoglycaemia in awake patients.

Key messages

What is already known on this subject?
While both dietary sugars and glucose tablets are available for treating symptomatic hypoglycaemia in awake patients with diabetes, the ideal treatment strategy is unknown.

What might this study add?
Glucose tablets should be considered first, if available, when treating symptomatic hypoglycaemia in awake patients.

children.[2 3] These events impact patients on a personal level and also result in lost work and increased healthcare costs.[2] It is estimated that over $100 million is spent annually treating hypoglycaemia in US EDs.[4] Other countries, including the UK, have noted frequent episodes of hypoglycaemia in patients with diabetes (11–12 events/100 years), with certain areas, including the Tayside region of Scotland spending over 92 000 pounds annually treating hypoglycaemia.[5]

Although one of the goals of diabetes care is avoidance of hypoglycaemic events, management plans that aim for blood sugar levels as close as possible to normal mean that hypoglycaemic events may occur. Early recognition with the most appropriate intervention can help treat symptomatic hypoglycaemia and obviate the need for immediate transport for further medical care. Hypoglycaemia is the most common diabetic emergency encountered by Emergency Medical Service (EMS) personnel and can often be managed safely and effectively

Burns

Evidence	Guidelines	
Immediate cooling of burns may relieve pain, reduce edema, infection rates, and the depth of burns. *The published literature for different types of burn dressings was reviewed, however no scientific evidence was found to recommend a specific burn dressing.* *2002, Nguygen NL, Gun RT, Sparnon AL, Ryan P.*	Burns must be cooled with cold water as soon as possible for a minimum of 10 minutes	***
There is no scientifically supported recommendation for the specific cooling temperature, the method of cooling (e.g. gel pads, cold probes or water) or the duration of cooling. The use of ice to treat burn injuries is not beneficial and can cause tissue damage.	As clean water is available in many areas of the world, clean tap water should be used. Ice should not be applied to burn wounds	*
	Care must be taken when cooling large burns or burns in infants and small children so as not to induce	*

Verbrennungen

- "Aktive" Kühlung wird immer noch für alle thermischen Verbrennungen empfohlen (wenn möglich mit Leitungswasser)
- Keine Beweise für nasse oder trockene Verbände: Verbrennungen sollten je nach den lokalen Gewohnheiten mit einem sterilen Verband behandelt werden

Stabile Seitenlage

Bewusstlosigkeit

Seitenlage : Ja

ABER keine ausreichenden wissenschaftlichen Beweise, um eine Position gegenüber einer anderen zu empfehlen.

Brustschmerzen

- Unverzügliches Rufen des Rettungsdienstes
- Wenn Brustschmerzen aufgrund eines Herzproblems auftreten, 150-300 mg kaubares oder lösliches Aspirin, wenn keine Allergie besteht. *

* Wenn in Übereinstimmung mit nationalen Rechtsvorschriften

Dehydrierung

- 3-8% Kohlenhydrat-Elektrolyt-Getränke
- Alternative Getränke zur Rehydrierung: Wasser, 12% Kohlenhydrat-Elektrolyt-Lösung, Kokoswasser, 2% Milch, Tee, Tee-Kohlenhydrat-Elektrolyt oder koffeinhaltige Teegetränke

Fieber

- Paracetamol * sollte einer Person mit Fieber verabreicht werden
- Paracetamol können mit lauwarmem Wasser (von 29 ° C bis 33 ° C) versetzt werden,
- Verwenden Sie kein kaltes Wasser zum Spülen

* Wenn in Übereinstimmung mit nationalen Rechtsvorschriften

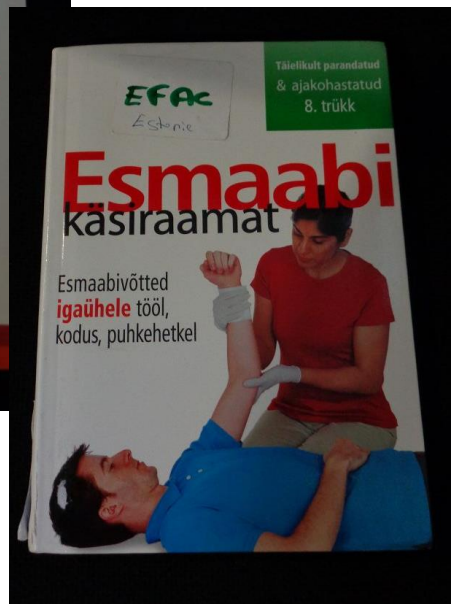
Blutungen

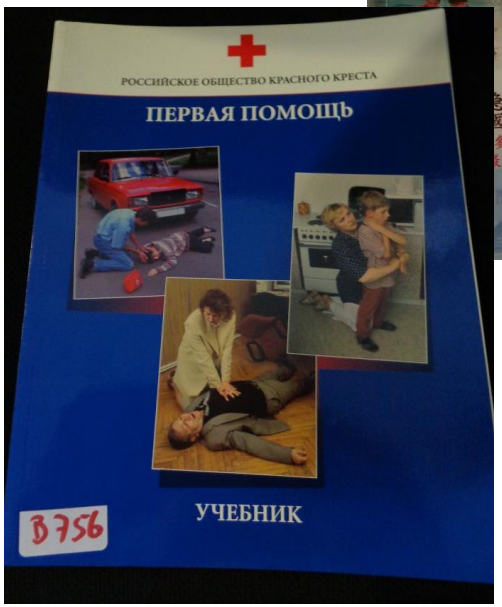
- Verwenden Sie eine kalte Kompresse für Hämatome
- Abbindung - NICHT für die allgemeine Öffentlichkeit empfohlen

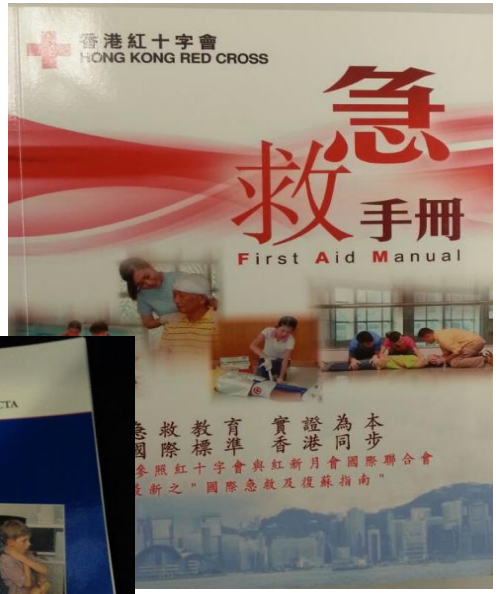
Reanimation

- Aufrechterhaltung der Beatmung für "diejenigen, die dazu in der Lage oder ausgebildet sind„
- Dispatcher – Assisted CPR
- Defibrillation und PAD wenn vorhanden und gesetzlich erlaubt

Beispiele







Ziel: Alle Bevölkerungsgruppen zu lehren

EH im betrieblichen Kontext

- Ersthelfer sind in den meisten Ländern im betrieblichen Kontext obligatorisch
- Dauer und Ausbildungs-inhalte sehr unterschiedlich

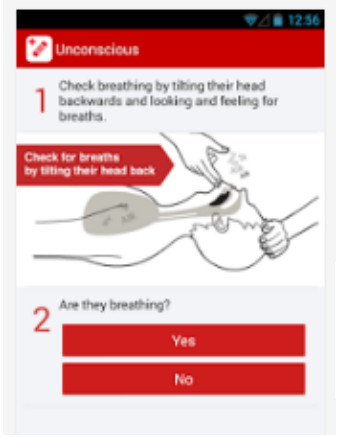
EH Training – Constanca Bohrinsel Petrom

Moderne Technologien

Mexican RC

Singapore RC

Myanmar RC

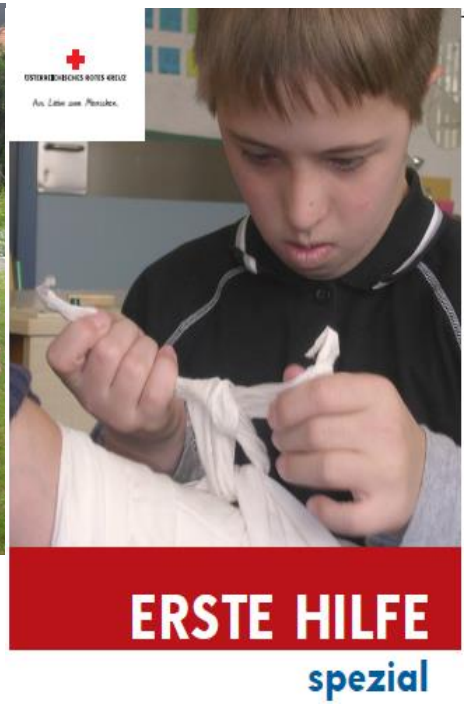


Australian RC

Traditionelle Ansätze

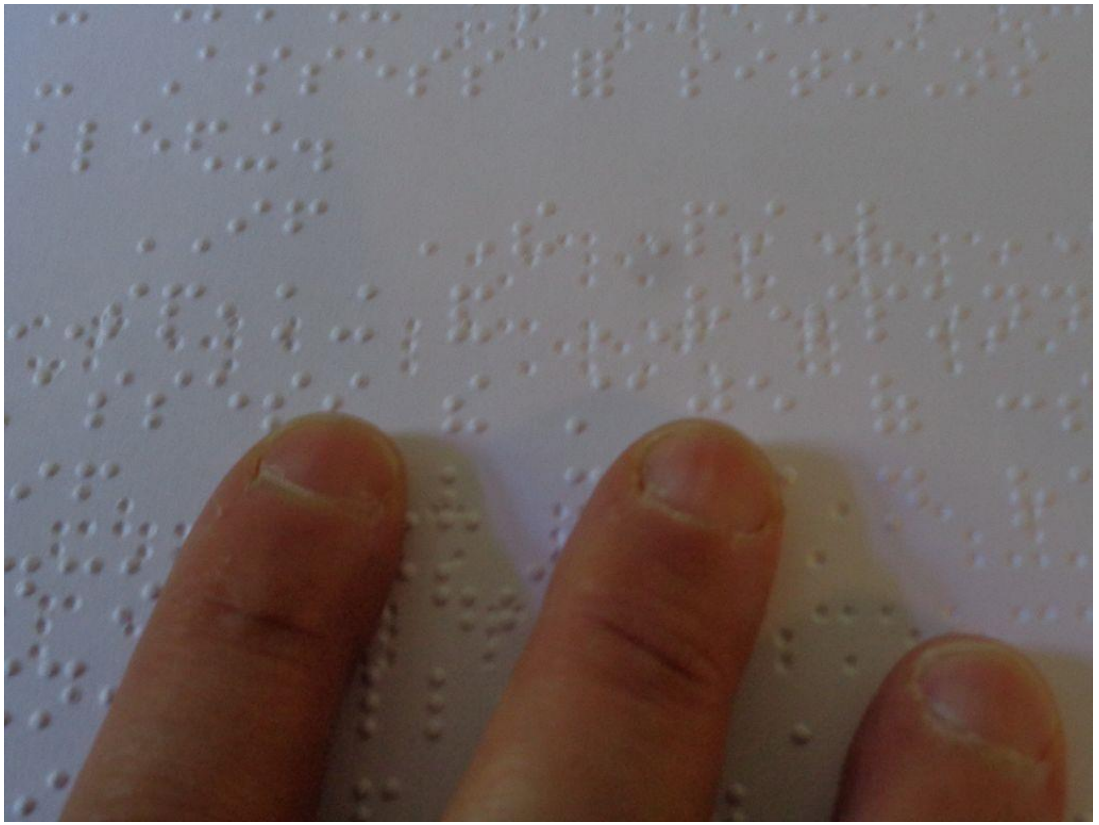
Erste Hilfe für Menschen mit besonderen Bedürfnissen

ÖRK



British RC

EH in Braille – Türkischer Halbmond



First Aid for Pets

Top 5 Features of the American Red Cross **Pet First Aid App**

American Red Cross

- Step-by-step instructions for first aid emergencies
- Animal hospital locator
- Pet profile for storing tag ID, photo and medical information
- How to include pets in emergency preparedness plans
- Early warning signs for when to contact a veterinarian

Download at Apple App Store or Google Play Store for Android.
Learn about all Red Cross apps at **redcross.org/mobileapps**.

World First Aid Day

- Every second Saturday of September

– To promote first aid

– To sensitise the population

– To have a popular and media event

Nutzen von EH Guidelines

- Immer mehr Evidenz in Erste Hilfe Ausbildung – immer weniger Meinungen
- „Harmonisation“ vs „Standardisation” – Anpassung von Lehrmeinungen und – inhalten bei Respekt von Unterschieden
- Zunahme von Rechtssicherheit in Bezug auf Lehrinhalte – in machen Staaten sehr wichtig
- Verbreitung des EH Wissens in Bevölkerung – neue Zielgruppen

Die nächsten Schritte:

- **Wir arbeiten an den Guidelines 2021**
- **Neubewertung neueren wissenschaftlichen Datenmaterials von bereits bearbeiteten Themen und Neuaufnahme von bisher nicht bearbeiteten Themen – speziell auch pädagogischer Fragen (z.B. optimale (Auffrischungs)kurse – Dauer und Rhythmus, Methoden & Inhalte der Ausbildungen – zielgruppenorientiert,…)**
- **Überlegungen zu verbesserten Marketing um Zielgruppen die bisher eher schlecht erreicht werden – besser zu erreichen: z.B. ältere Menschen, Migranten,..)**