Indian First Aid Guidelines

IFAG development project

Indian Red Cross Society
Established Parliament Act XV of 1920
Voluntary organisation
35 state branches, 700 district branches throughout India
Activities:
- Promoting fundamental principles and humanitarian values
- Disaster preparedness, disaster response and disaster relief
- IRCS Certified First Medical Responders (C-FMR)
- Health training
- Blood bank
- HIV/AIDS, TB, ... health projects
- Tracing
- Maternity and child welfare
- Nursing
- Elderly care
- Youth activities
Red Cross and First Aid

- First Aid Training, a **Red Cross cornerstone**
  - First Aid at the **heart of the Red Cross Movement**.
  - First Aid helps to **build up community resilience to disasters and emergency situations**.
  - First Aid training is one of the **low cost, but highly effective opportunities** to improve health and welfare in Asia (World Bank, 2006)
  - Indian Red Cross Society, together with its sister organisation St John Ambulance India, trains **more than 600.000 laypeople yearly** on basic first aid in India.
Project objective

- Update current First Aid Manual
  - Using Evidence Based Methodology
  - Contextualised content to Indian situation and environment
  - Targetted specifically at Indian laypeople
JAN 2013: Project agreement for intensive collaboration between two Red Cross Societies:

- Indian Red Cross Society
- Belgian Red Cross-Flanders

To develop:

- Indian First Aid Guidelines (IFAG)
- Indian First Aid Materials (IFAM)

Funded by Belgian Government & Belgian Red Cross-Flanders
<table>
<thead>
<tr>
<th>Indian First Aid Guidelines</th>
<th>Indian First Aid materials</th>
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<tbody>
<tr>
<td>Guideline development project.</td>
<td>Project to develop first aid manual and supporting materials.</td>
</tr>
<tr>
<td>Lists recommended interventions suitable to be done by laypeople.</td>
<td>Practical first aid guide for laypeople.</td>
</tr>
<tr>
<td>Includes evidence based recommendations and Good Practice Points (GPP).</td>
<td>Very graphical approach.</td>
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<tr>
<td>Outcome:</td>
<td>Includes teaching tools like posters, DVD, ...</td>
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<tr>
<td>- Reference book used to develop first aid manuals</td>
<td>Further locally adapted to specific local situation.</td>
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<tr>
<td>- Scientific background book</td>
<td>Outcome:</td>
</tr>
<tr>
<td></td>
<td>- First aid manuals</td>
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<td></td>
<td>- Teaching materials</td>
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</table>
IFAG-IFAM – International partnership

CEBaP: Gives evidence-based support to all programmes and activities of Belgian Red Cross-Flanders

- 2006: Development of European first aid guidelines and European First Aid Manual (EFAM)
IFAG-IFAM – Project timeline

IFAG/IFAM Start
1/1/2013

IFAG Evidence Search
15/8/2013

IFAG Expert Panel Meeting 1
16/1/2014

IFAG Expert Panel Meeting 2
3/5/2014

IFAG Publication Released
21/10/2014

IFAM V1 Pilot 1
12/1/2015

IFAM V1 Pilot 2
16/2/2015

IFAM V1 Pilot 3
16/3/2015

IFAM V1 Publication Released
23/3/2015

IFAM V2 Publication Released
12/9/2015

IFAM Youth Released
18/12/2015

IFAM Young Parents Released
18/3/2016

IFAM Road Accidents Released
18/6/2016

IFAM Elderly Released
10/9/2016

Indian Red Cross Society
Belgian Red Cross-Flanders
IFAG – Development Process

1. BRC-F Centre for Evidence-Based Practice

2. Indian Red Cross Society

3. Best Available Scientific Evidence

4. Preferences and Available Resources of the Target Group

5. Evidence-Based Practice

6. Practical Experience and Expertise of Experts in the Field
IFAG – Development Process

1. Search strategy for India + specific focus on Indian articles and evidence

2. India focus

3. PREFERENCES AND AVAILABLE RESOURCES OF THE TARGET GROUP

BEST AVAILABLE SCIENTIFIC EVIDENCE

PRACTICAL EXPERIENCE AND EXPERTISE OF EXPERTS IN THE FIELD
IFAG – Development Process

BRC-F Centre for Evidence-Based Practice

BEST AVAILABLE SCIENTIFIC EVIDENCE

India focus
Search strategy for India + specific focus on Indian articles and evidence

PREFERENCES AND AVAILABLE RESOURCES OF THE TARGET GROUP

Target group
Indian laypeople

PRACTICAL EXPERIENCE AND EXPERTISE OF EXPERTS IN THE FIELD
IFAG – Development Process

**BRC-F Centre for Evidence-Based Practice**

**BEST AVAILABLE SCIENTIFIC EVIDENCE**

**India Focus**
Search strategy for India + specific focus on Indian articles and evidence

**PREFERRED AND AVAILABLE RESOURCES OF THE TARGET GROUP**

**Target group**
Indian laypeople

**EVIDENCE-BASED PRACTICE**

**PRACTICAL EXPERIENCE AND EXPERTISE OF EXPERTS IN THE FIELD**

**Panel of external experts**
Multidisciplinary panel of Indian experts

**Indian Red Cross Society**
# IFAG – Expert Panel

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Title</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prof Dr S.P. Agarwal</td>
<td>Secretary General IRCS (neurosurgeon)</td>
<td>IRCS</td>
</tr>
<tr>
<td>Dr V. Bhushan</td>
<td>Joint Secretary IRCS (surgeon)</td>
<td>IRCS</td>
</tr>
<tr>
<td>Dr K. Raizada</td>
<td>IFRC Representative (GP/Family doctor)</td>
<td>IFRC</td>
</tr>
<tr>
<td>Prof Dr M. Singhal</td>
<td>Surgeon Trauma Center AIIMS New Delhi</td>
<td>AIIMS</td>
</tr>
<tr>
<td>Shri V. D. Triguna</td>
<td>Specialist traditional medicine – Ayurveda</td>
<td>BIMS</td>
</tr>
<tr>
<td>Dr R.L. Ichhpujani</td>
<td>Specialist Infectious diseases</td>
<td>NCDC</td>
</tr>
<tr>
<td>Dr Chandra</td>
<td>Consultant</td>
<td>Safdarung Hospital</td>
</tr>
<tr>
<td>Dr J. Singh</td>
<td>Epidemiologist</td>
<td>NCDC</td>
</tr>
<tr>
<td>Mr M. Chaudhary</td>
<td>Director</td>
<td>IRCS</td>
</tr>
<tr>
<td>Prof Dr T.S. Jayalakshmi</td>
<td>Anaesthetist – Health advisor IRCS</td>
<td>IRCS</td>
</tr>
<tr>
<td>Mr M.M. Gupta</td>
<td>FA specialist</td>
<td>St John Ambulance India</td>
</tr>
<tr>
<td>Mr S.C. Goyal</td>
<td>FA Trainer</td>
<td>IRCS</td>
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IFAG – Guideline development method

GUIDELINE DEVELOPMENT PROCESS

~ AGREE II
IFAG – Guideline development method

GUIDELINE DEVELOPMENT PROCESS

1. Project Prioritization: Steering committee

~ AGREE II

BRC-F - IRCS
IFAG – Guideline development method

GUIDELINE DEVELOPMENT PROCESS

1. Project Prioritization: Steering committee
2. Formulation of the research questions (PICO) and definition of eligibility criteria

Focus on First Aid intervention to be executed by laypeople

Examples:

- Which interventions [I] are effective and feasible for laypeople [P] as first aid technique in case of burns [O]?

- What interventions are effective and feasible for laypersons to prevent malaria?

- Specific India search strategy:
  1. "malaria"[Mesh] OR “malaria”[TIAB]
  2. India filter
  3. Prevention Filter
  4. 1-3 AND

INDIA
IFAG – Guideline development method

GUIDELINE DEVELOPMENT PROCESS

1. Project Prioritization: Steering committee
2. Formulation of the research questions (PICO) and definition of eligibility criteria
3. Development of search strategy & search in multiple databases

Databases:
- MEDLINE
- GIN (Guidelines International Network)
- NGC (National Guideline Clearing house)
- The Cochrane Library
- Google/Google Scholar

Existing guidelines:
- ILCOR
- AHA/ARC
- IFRC
## IFAG – Guideline development method

### GUIDELINE DEVELOPMENT PROCESS

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7. Guideline validation and contextualisation (panel discussion)

Indian English guidelines for Indian laypeople (e.g. Indian word choice for the recommendations) and applicable in an Indian context
# IFAG – Guideline development method

## GUIDELINE DEVELOPMENT PROCESS

1. **Project Prioritization**: Steering committee
2. **Formulation of the research questions (PICO) and definition of eligibility criteria**
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7. **Guideline validation and contextualisation (panel discussion)**
8. **Panel outcome reviews; Extra evidence searches & reviews; Peer reviews**

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**Example:**

Is the preferred dose of aspirin to be given at the onset of an heart attack the same for Indians?
## IFAG – Guideline development method

### GUIDELINE DEVELOPMENT PROCESS

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Peer ‘specialty’ reviews:
- Cardiology
- Gynecology
- Ophthalmology
- ...
IFAG – Guideline development method

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9. Layout and publication

IFAG Guidelines published October 2014
IFAG – Expert Panel Meetings
IFAG – Expert Panel Meetings

IFAM:
Evidence review & proposed drafted guidelines
IFAG – Expert Panel Meetings
Expert Panel Meeting organization

- At headquarter Indian Red Cross Society, New Delhi.
- Two day sessions held in January and May 2014.
- Included a refresher on EBM/EBP and Guideline development.
- Chaired by Prof. Dr. Agarwal, Secretary General IRCS.
- Delegation of BRC-F lead by Prof. Dr. Vandekerckhove
  - Process guidance
  - Evidence research and presentation.
- Consensus meeting based on presented draft recommendations
- Meeting outcomes and research results were provide to the experts prior to meetings (electronically and on paper).
- Inter-meeting reviews were done via mail and email.
IFAG – Expert Panel Meetings

**Topic List:**

- Basic CPR
- Fainting and unconsciousness
- Difficult or no breathing
- Chest discomfort
- Bleeding (internal, external, cuts and grazes, nose bleeds)
- Eye injuries
- Strains, sprains and broken and dislocated limbs
- Burns
- Bites, stings and poisoning.
- Disease related topics (chikungunya, diarrhoea, malaria, measles, pneumonia)
- Pregnancy and (emergency childbirth)
IFAG – Expert Panel Meetings

Main questions:

• Initial assessment by a layperson
• Management of the trauma or disease by a layperson.
• Criteria for seeking medical help.

• **Added:** Preventive measurements that can be taken by layperson.

Validations:

• Internal validation by the expert panel members.
• External validation by peer-reviewers.
### Diarrhoea and ORS:

**Indian Research:**

- ORS versus no ORS (Bhan 1988)
- Zinc+ORS versus standard ORS (Wadha 2011)
- Rice water versus standard ORS (Metha 1986, Fakhir 1990)
- Lentil ORS versus standard ORS (Bahn 1987)
- HAMS (High Amylase Maize Starch)-ORS versus standard ORS (Ramakrishna 2008, Raghupathy 2006, Ramakrishna 2000)
- Alanine-based ORS versus standard ORS (Sazawal 1991)
- Diluted ORS versus ORS (Bhargava, 1986)
- Drinking Actimel versus ultra-heat treated fermented milk (Agarwal 2002)
- Indian Dahi versus ultra-heat treated fermented milk (Agarwal 2002)
- Drinking probiotics (Riaz 2012)
- Vitamin A supplement versus placebo (Biswas 1994, Bhandari 1994)
- Breast feeding and dehydration of baby (Bhattacharya 1995)

(* Article not accessible at the time of research).
Diarrhoea and ORS:

Evidence found:
- quality of evidence found

Context and availability:
- must be applicable by lay person
- product must be available

Expert knowledge:
- governmental approach to specific problem

Standard ORS (as per government)
Common laypeople practices (rice water, coconut water, ...)
and other ORS-solutions
IFAG – Next steps

- Development of **graphical aids** (NOV 2014-FEB 2015)
  - Drawings to support the technique.
  - Guarantee access to the information for those who have difficulties reading.

- Development of **specific local first aid manuals** (OCT 2014-SEP 2016)
  - Based on the IFAG guidelines.
  - Adapted to local situation (urban/rural; coastal/mountain area; ...).

- Development of **supportive first aid training material** (OCT 2014-SEP 2016)

- Testing of developed materials (JAN 2015-MAR 2015)
  - is it understood correctly?

- **Roll Out over India** (APR 2015-...)

- Development of specific **targeted modules**: (OCT 2015-SEP 2016)
  - Young parents (parents at young age)
  - Elderly care
  - Road safety (putting good first aid training on the drivers training curriculum for all drivers)
  - Youth training (teacher and scholar FA training packages)
Starting with a refreshment of the guideline development process is important.

Good guideline development guidance is a requirement.

Open free communication in a consensus meeting is crucial.

Keeping the targeted public – the laypeople – in mind is not easy, but a must.

Bring always the 3 elements together:
- Evidence
- Preferences and availability of resources
- Expertise and experience.

Make the guideline recommendation easy to read, easy to remember.

Reviews by peers is extremely helpful for providing extra insights.

First aid: prevention is to be considered an inherent part of first aid training.

First aid: a step in building community disasters resilience … but also provides immediate result in every days life!
Questions?
Thank you for your attention!