

Swiss TPH



Swiss Tropical and Public Health Institute  
Schweizerisches Tropen- und Public Health-Institut  
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## Health Systems Strengthening and Conflict Transformation in Fragile States

Amsterdam, Thursday, 11 October 2012

# Health systems evidence and guidance in fragile states

What if before starting doing what ought to be done we start doing what we should have done?

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**The objective** of this Expert Meeting is to facilitate learning and information sharing on health sector initiatives that aim to improve health outcomes, contribute to longer term, sustainable health system strengthening and conflict transformation, **in order to inform...**

Programming

Policy

Advocacy

Research

Civil society

evidenceaid

## NEEDS ASSESSMENT

To identify **attitudes** towards systematic reviews [...] of those people involved in humanitarian responses, disasters and other crises.

To identify **priorities** for evidence.

To identify **preferences** for ways to access the information.

All this is about...

**...informing (with evidence)  
DECISIONS (what to do?)**

**Well, what is "BETTER";  
but better, for whom?**

Domains	Actors	What is better
Programming	Practitioners	Easy...
Policy	Decision-makers	Cheap...
Advocacy	Stakeholders	Values...
Research	Researchers	Effective...
Civil society	Population	Acceptable...



All this is about...

# Evidence (to inform what is better) on different issues:

Domains	Actors	What is better	Evidence
Programming	Practitioners	Easy...	Implementation
Policy	Decision-makers	Cheap...	Costs, sustainability
Advocacy	Stakeholders	Values...	Equity
Research	Researchers	Effective...	Effects on outcomes
Civil society	Population	Acceptable...	Effects on utilisation

# Different types of EVIDENCE (to inform what is better):

Domains	Actors	What is better	Evidence	Types of evidence
Programming	Practitioners	Easy...	Implementation	SR implementation
Policy	Decision-makers	Cheap, acceptable	Costs, sustainability	SR costs; colloquial evidence
Advocacy	Stakeholders	Values...	Equity	SR equity; colloquial evidence
Research	Researchers	Effective...	Effects on outcomes	SR effectiveness
Civil society	Population	Appropriate	Effects on utilisation	SR problems; colloquial evidence





## Example:

### **Parental Decision Making for Children With Cancer at the End of Life: A Meta-Ethnography.**

Parents of pediatric oncology patients are faced with difficult decisions when their child reaches the end of life. For health care providers to provide optimal care, they must understand parents' perspectives and preferences in end-of-life decision making. Therefore, this article provides a systematic review [...] on the end-of-life decision making of parents of children with cancer as well as recommendations for practice and future research.

[Heinze KE, Nolan MT. J Pediatr Oncol Nurs. 2012 Sep 19.](#)



# How can we handle evidence of different types?

What have clinicians done? **CLINICAL GUIDELINES**

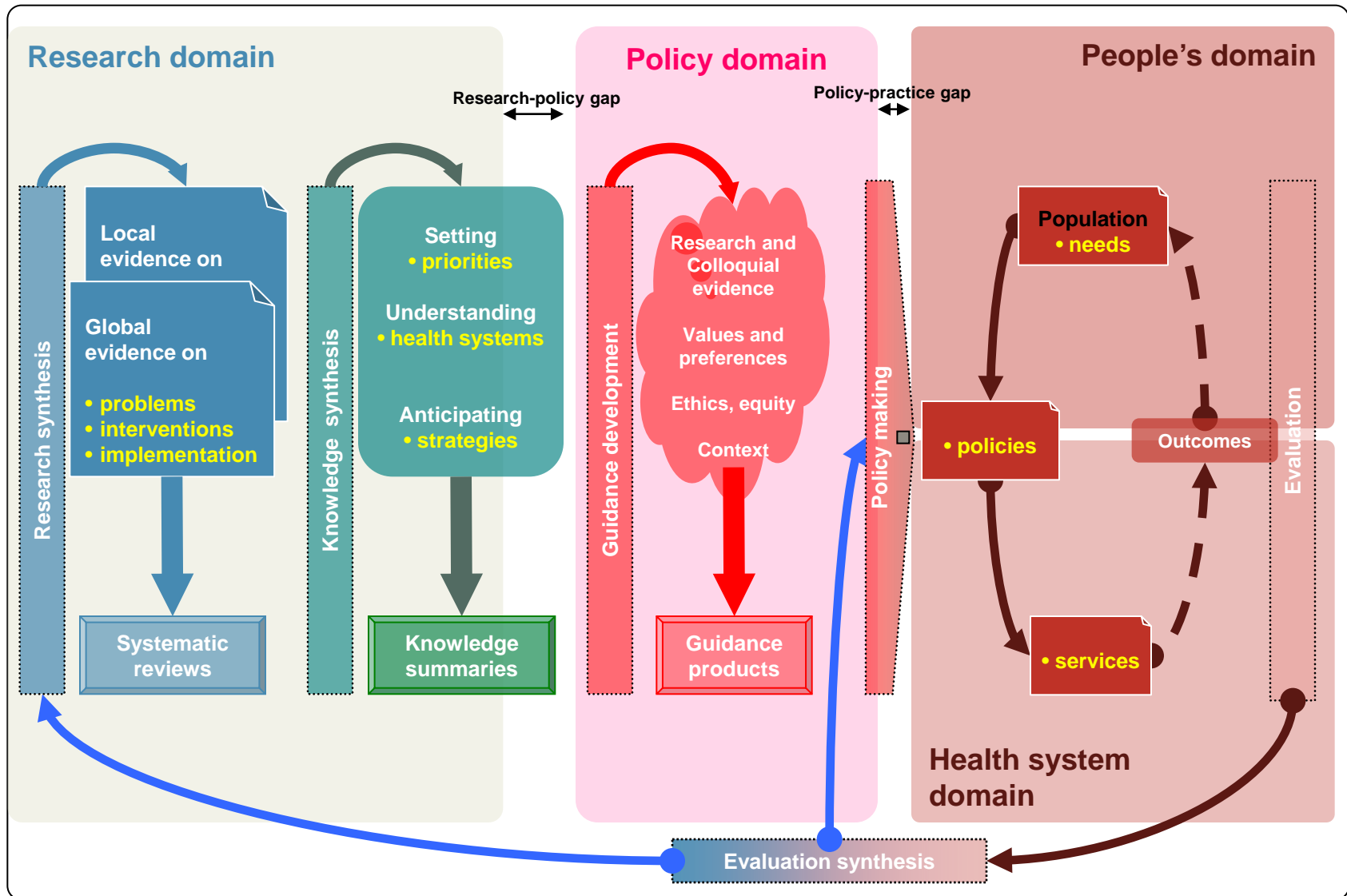
Definition: “systematically developed body of knowledge, integrating research evidence and descriptions of the types of other considerations needed to inform decision making about appropriate health system arrangements in specific settings”

Example: “Post-traumatic stress disorder” (NICE)

Drug treatments for PTSD should not be used as a routine first-line treatment for adults [...] (A).

Patient preference should be an important determinant of the choice [...] (GPP).





# Challenges in producing health systems guidance

Challenges	Research	Decision-making in fragile states
1) Type of evidence	Answers to questions	Solutions to problems
2) Quality of evidence	Poor	
3) Timeliness	Its own agenda	"Decision window"
4) Health systems	Delimited scope	Volatile
5) Context	Controlled environment	Typically uncontrolled

Systematic reviews are useful in disasters (83%).

'Evidence from systematic reviews could have a positive role in humanitarian interventions' (99%).



# 1) Types of evidence

Evidence on problems, evidence on the effects of interventions and evidence on implementation issues

**Research evidence** on “researchable” matters and **colloquial evidence** on values, preferences, political environment...

Complexity of research evidence

Research evidence **answers questions**; while decision-makers **solve problems**.

‘Humanitarian interventions should be based on **reliable knowledge** of which interventions work, which don’t work and which are potentially harmful’ (96%).

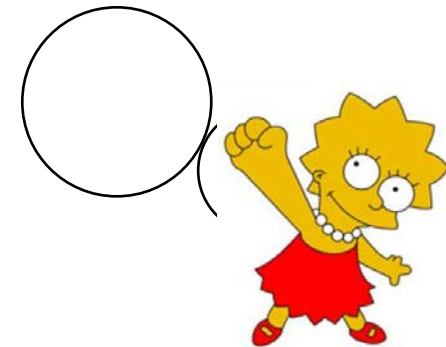
‘**SRs are not practical in decision-making** about humanitarian interventions’ (70%).



2. when the recommendation is against an intervention and the 95% confidence interval (or alternative estimate of precision) around the pooled or best estimate of effect

- a. the 95% confidence interval (or alternative estimate of precision) around the pooled or best estimate of effect includes no effect and the lower confidence limit includes an effect that, if it were real, would represent a harm that, given the benefits, would still be unacceptable

GRADEProfiler help (3.6)





## 2) Quality of evidence

In general “poor quality”.

What does NOT mean “poor quality”?

- dismissible
- less useful
- more vulnerable to colloquial evidence
- less strong recommendations

It means:

- more prone to bias
- indirect in relation to the outcomes of interest
- transparency

**It is not possible to draw any conclusions** about the effectiveness of strategies to change organisational culture

Parmelli E et al. The effectiveness of strategies to change organisational culture to improve healthcare performance. Cochrane Library.

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‘SRs are not practical in decision-making about humanitarian interventions’ (70%).



### 3) Timeliness of evidence

- different timing of research and guidance agendas;
- different priorities between researchers and decision-makers
- long process to synthesise, integrate, compile and disseminate guidance
- short 'decision windows' (often unpredictable)

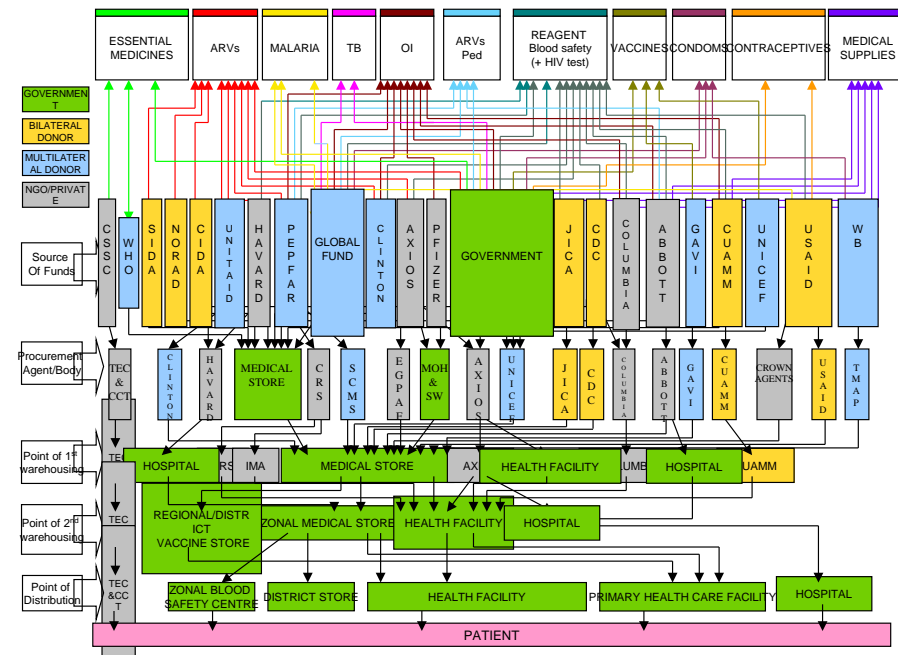
- When a natural disaster is not known to be imminent (66%).
- During the period of prediction that a disaster will happen (70%).
- During and shortly after a disaster (51%).
- After a disaster (during the period of recovery and development work) (56%).





## 4) Health System setting

- Very specific to each country
- 'Black box'
- Lack of operating framework
- Unpredictable

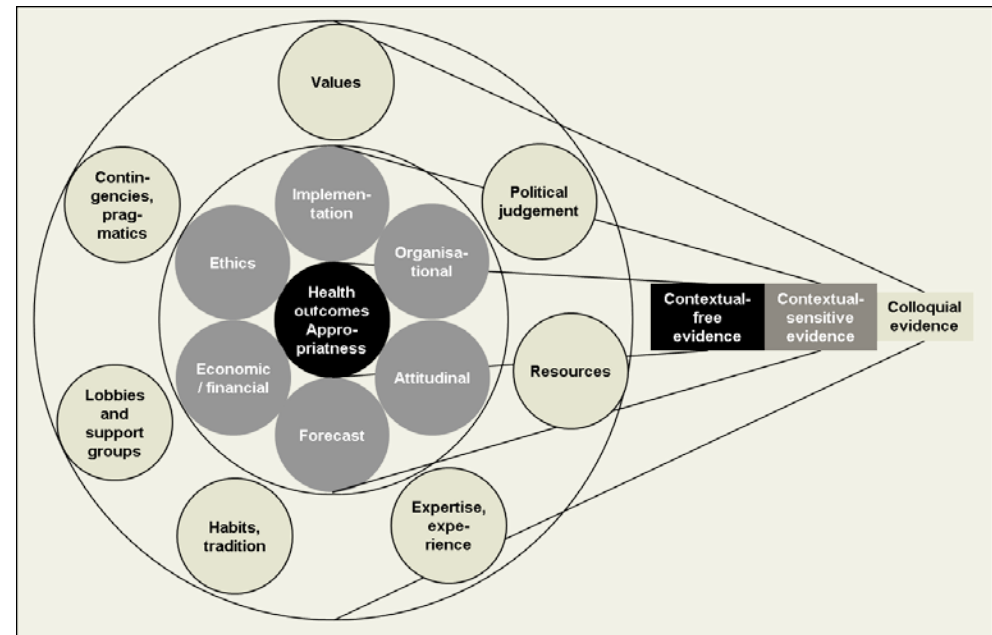


## 5) Context (fragile states!)

- Health systems evidence is context-specific
- Difficult to capture and describe
- Beyond the control of research and decision-making

- Respondents favor access to full **reviews** supplemented by comments from relevant **experts** (61%) to help place the findings of the review in **context** for the disasters setting.

evidence 





Established after the Indian Ocean Tsunami in December 2004.

## How Cochrane Reviews could help people during a natural disaster or humanitarian crisis?

- Use of SR to provide **reliable, up-to-date evidence** on interventions that might be considered in the context of natural disasters and other major healthcare emergencies.
- Highlight which **interventions** work, which don't work, which need more research, and which, no matter how well meaning, might be harmful.
- Provide information to agencies and people **preparing for, or responding to**, disasters.



2010: funding was sought from The Cochrane Collaboration, John Wiley and Sons Ltd, McCall McBain and others.

Late 2010: Needs Assessment.

2010 – 2011: the Needs Assessment showed that there was no equivalent to Evidence Aid.

2011 Claire Allen started to identify Cochrane Reviews of relevance to disaster settings.

1<sup>st</sup> Evidence Aid conference (Oxford) with 70 participants: most from aid agencies.



## Relevance of systematic reviews

- 5,074 Cochrane SR and 2,198 protocols published.
- Results:
  - 133 'high priority'
  - 486 no agreement
  - 176 not relevant.
- Examples of high priority:
  - Damage control surgery for abdominal trauma (conflict, earthquake...)
  - Antibiotics for preventing infection in open limb fractures (earthquake...)
  - Rapid Diagnostic Tests for Typhoid and Paratyphoid (Enteric) Fever (flooding, famine, drought...)
  - Interventions for treating phosphorus burns (fire, wildfire...)



## Conclusions

- Research evidence is neither appropriate nor enough to inform decisions.
- Different types of evidence have to be integrated into a body of knowledge (guidance) able to inform decisions.
- The production of guidance poses several methodological challenges, some of which are not fully understood.
- These challenges are specially severe when the issue is health systems and the context is a fragile state.
- EvidenceAid is a step forward in producing research evidence relevant to crisis situations.
- Further efforts need to be articulated around methodological approaches involved relevant stakeholders.





# Thanks for your attention.

Swiss Tropical and Public Health  
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<http://www.swisstph.ch/>

Handbook Health Systems  
Guidance:

[http://www.swisstph.ch/fileadmin/user\\_upload/Pdfs/SCIH/WHOHSG\\_Handbook\\_v04.pdf](http://www.swisstph.ch/fileadmin/user_upload/Pdfs/SCIH/WHOHSG_Handbook_v04.pdf)

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Website: [www.evidenceaid.org](http://www.evidenceaid.org)

Twitter: @evidence Aid

Facebook: Evidence Aid

E-mail: [callen@evidenceaid.org](mailto:callen@evidenceaid.org)

Level	Type of evidence	Grade	Evidence
I	Evidence obtained from a single randomised controlled trial or a meta-analysis of randomised controlled trials	A	At least one randomised controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation (evidence level I) without extrapolation
IIa	Evidence obtained from at least one well-designed controlled study without randomisation	B	Well-conducted clinical studies but no randomised clinical trial on the topic of recommendation (evidence levels II or III); or extrapolated from level I evidence
IIb	Evidence obtained from at least one other well-designed quasi-experimental study		
III	Evidence obtained from well-designed, non-experimental descriptive studies, such as comparative studies, correlation studies and case studies		
IV	Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities	C	Expert committee reports or opinions and/or clinical experiences of respected authorities (evidence level IV) or extrapolated from level I or II evidence. This grading indicates that directly applicable clinical studies of good quality are absent or not readily available
		GPP	Recommended good practice based on the clinical experience of the Guideline Development Group

Adapted from Eccles & Mason (2001); Department of Health (1996).