Multilanguage tools for evidence-based practice

Created by UK Health Security Agency for the IFLA Evidence for Global and Disaster Health Special Interest Group.

Contents

Introduction

In times of crisis, humanitarian workers need timely evidence which suits the local context within which they work, and they need to be able to communicate effectively across a range of languages. This guide complements our Finding the Evidence for Global and Disaster Health (http://bit.ly/E4GDHLeaflet), and contains a range of Multilanguage tools to support cross-working and overcome language barriers in global and disaster health.

Suggestions for additional resources are welcome and will be considered for future updates. Please send these to E4GDHteam@gmail.com.

Dictionaries and translation tools

- **Emergency and crisis communication vocabulary**
  This document includes approximately one hundred terms, in English and French, to use when communicating about emergencies and crises.
  http://publications.gc.ca/collections/Collection/S52-2-252.pdf

- **Emergency multilingual phrasebook**
  The British Red Cross has produced this publication with the advice and support of the National Health Service. This multilingual phrasebook has been designed for use in medical emergencies, where the patient does not speak English. It contains a list of essential questions in 36 languages, with English translations. It will enable basic communication between first contact carers and patients in some emergency situations.
  https://webarchive.nationalarchives.gov.uk/20130105192116/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4073230

- **English-French emergency management glossary of terms**
  This glossary covers a wide range of Emergency management terminology, in English and French.
  https://www.emergencymanagementontario.ca/sites/default/files/content/emo/docs/EM%20Glossary%20of%20Terms_PDFUA.pdf

- **Google Translate - website and app**
  This site lets you type, talk, translate images, write, and access text translations offline, and communicate in over 100 languages.
  https://translate.google.com/

- **Hierarchy of disaster management terms**
  This glossary is a result of a joint effort of a number of inter-governmental organizations, nongovernmental organizations and national institutions to publish a collection of internationally agreed definitions of disaster-related basic terminology. The terms are also available in French and Spanish.
  https://reliefweb.int/sites/reliefweb.int/files/resources/004DFD3E15B69A67C1256C4C006225C2-dha-glossary-1992.pdf

- **Interactive Terminology for Europe (IATE)**
  IATE is the EU's terminology database. It has been used in the EU institutions and agencies since summer 2004 for the collection, dissemination and management of EU-specific terminology.
  https://iate.europa.eu/home

- **Linguee Dictionary and App**
  This is a dictionary app for Spanish, French, German, Portuguese, Russian, Chinese, Japanese, Italian, Dutch, and Polish. All dictionaries are bidirectional, and translations can even be found offline.
  https://www.linguee.com/

- **MediBabble Translator**
  This is a history-taking and physical exam application designed to improve the safety, efficiency, and quality of care for non-English speaking patients.
  https://apps.apple.com/us/app/medibabble-translator/id355398880

- **Microsoft Translator**
  This app translates real-time conversations, menus, street signs, websites, and documents in to more than 60 languages. There is a personal and business option.
  https://www.microsoft.com/en-us/translator/

- **Picture Communication Tool**
  This tool comprises sets of drawings that can be used with people whose first language is not English, or who are unable to communicate verbally. It cannot replace the need for interpreters but can be particularly useful for day to day activities within a medical setting.
  http://www.picturecommunicationtool.com/index.shtml

- **ReversoTranslation**
  This is an online translator based on AI technology for up to 800 characters, and translates between a range of languages, including Arabic, Chinese, Dutch, English, French, German, Hebrew, Italian, Japanese, Polish, Portuguese, Romanian, Russian, Spanish, and Turkish.
  http://www.reverso.net/translationresults.aspx

- **SYSTRAN translate**
  This enables short, quick translations, of up to 5,000 characters, between a range of languages, including Albanian, Arabic, Bulgarian, Catalan, Chinese, Croatian, Czech, Danish, Dutch, English, Estonian, Finnish, French, German, Greek, Hebrew, Hindi, Hungarian, Indonesian, Italian, Japanese, Korean, Latvian, Lithuanian, Malay, Norwegian, Persian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Slovenian, Spanish, Swedish, Thai, Turkish, Ukrainian, Urdu, Vietnamese.
  https://translate.systran.net/translationTools/text

- **Translators without Borders glossaries**
  TWB glossaries are a tool to assist humanitarian field workers and interpreters working on responses across the globe. They aim to improve communication between aid workers and communities by providing clear and accurate translations of humanitarian terms in an easy-accessible offline format. With the built-in audio feature, you can also hear the words spoken aloud. They have also created web apps.
  https://translatorswithoutborders.org/twb-glossaries/
  https://glossaries.translatorswb.org/

- **UNISDR terminology on Disaster Risk Reduction**
  The United Nations International Strategy for Disaster Reduction (UNISDR) Terminology aims to promote common understanding and common usage of disaster risk reduction concepts and to assist the disaster risk reduction efforts of authorities, practitioners and the public. It is available in English, Arabic, Chinese, French, Russian, and Spanish.
  English - https://www.unisdr.org/files/7817_UNISDRTerminologyEnglish.pdf
  Arabic - https://www.unisdr.org/files/7817_UNISDRTerminologyArabic.pdf
  Chinese - https://www.unisdr.org/files/7817_UNISDRTerminologyChinese.pdf
  French - https://www.unisdr.org/files/7817_UNISDRTerminologyFrench.pdf
  Russian - https://www.unisdr.org/files/7817_UNISDRTerminologyRussian.pdf
  Spanish - https://www.unisdr.org/files/7817_UNISDRTerminologySpanish.pdf

Health information for members of the public

- **Doctors of the World**
  This organisation has translated the latest government guidance on coronavirus, into 60 languages.
  https://www.doctorsoftheworld.org.uk/coronavirus-information/

- **Medline Plus**
  This resource is provided by the US National Library of Medicine, and provides access to health information in languages other than English.
  Health information in multiple languages -
  https://medlineplus.gov/languages/languages.html
  Health information in multiple languages: All health topics -
  https://medlineplus.gov/languages/all_healthtopics.html

- **NHS**
  The NHS in England signposts to patient information leaflets in a range of languages.
  https://www.nhs.uk/about-us/health-information-in-other-languages/

- **Respond Crisis Translation**
  This organisation has translated a 1-pager about preventing the spread of COVID-19.
  https://respondcrisistranslation.org/en/covid19

Shared decision-making

- **Informed Choices project**
  This project creates learning resources that enable people to recognise reliable claims and make informed health choices. The content of this site is published in Spanish, Norwegian, French, Kinyarwanda, Chinese, and Kiswahili.
  https://www.informedhealthchoices.org/

Guidelines

- **Medbox: The aid library**
  This multi-language resource contains key information on ebola, natural hazards, conflict, zika, tuberculosis, cholera, leprosy, polio, rapid response, refugee, disability, and specific hazards. Languages include a range of international and local languages.
  https://www.medbox.org/

Systematic reviews

- **Cochrane Library**
  Cochrane has published more than 28,000 translations of the abstracts and plain language summaries of their systematic reviews across 15 languages, including Croatian, French, German, Japanese, Korean, Malay, Persian, Polish, Portuguese, Russian, Spanish, simplified and traditional Chinese, Tamil, and Thai. Use the language

filter to limit by language.
https://www.cochranelibrary.com/search

- **Evidence Aid**
  This organisation uses knowledge from systematic reviews to provide reliable, up-to-date evidence on interventions that might be considered in the context of natural disasters and other major healthcare emergencies. Evidence Aid seeks to highlight which interventions work, which don't work, which need more research, and which, no matter how well meaning, might be harmful; and to provide this information to agencies and people planning for, or responding to, disasters. Some of the content is published in French, Spanish, Arabic, Chinese, German, Italian, and Portuguese.
  https://evidenceaid.org/evidence/

Databases

- **Epistemonikos**
  This is a collaborative, multilingual database of health evidence, and contains the largest source of systematic reviews relevant for health-decision making, and a large source of other types of scientific evidence.
  https://www.epistemonikos.org/

- **IRIS Pan American Health Organization (PAHO)**
  IRIS PAHO is a repository containing scientific information from Latin American countries, published in Spanish, Portuguese, and English.
  http://iris.paho.org/xmlui/discover

- **LILACS (Latin American and Caribbean Health Sciences Literature)**
  This is a bibliographic database, containing 895,000 records, including 480,000 available in full-text, about health information from Latin America and the Caribbean countries. The database can be searched in Spanish, Portuguese, and English.
  http://bases.bireme.br/cgi-bin/wxislind.exe/iah/online/?IsisScript=iah/iah.xis&base=LILACS&lang=p&form=A

- **Research4Life**
  This is the collective name for five programmes – Hinari, AGORA, OARE, ARDI and GOALI – that provide developing countries with free or low-cost access to academic and professional peer-reviewed content online. Some of the content is available in French, Spanish, and Portuguese. This site also includes an Advocacy Toolkit specifically developed for librarians.
  https://www.research4life.org/
  https://www.research4life.org/training/librarians-hub/

- **SciELO – Scientific Electronic Library Online**
  This is a bibliographic database, publishing scientific research in Spanish, Portuguese, and English. It contains 815, freely-available, scientific journals from different countries.
  https://scielo.org/en/

- **Virtual Health Library – BIREME**
  This database provides access to scientific and technical information in health in Latin America and the Caribbean, and is available in Spanish, Portuguese, and English.
  https://bvsalud.org/

- **WHO Global Research Database on COVID-19**
  This database represents a comprehensive multilingual source of current literature on the topic. It is updated daily from searches of bibliographic databases, hand searching, and the addition of other expert-referred scientific articles.
  https://search.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/

Teaching resources

- **Teachers of Evidence-Based Health Care**
  This site contains a Learning Resources Database, with multilingual resources to help teach evidence-based health care to an international population. Many languages are covered, including sign language.
  https://teachingebhc.org

Critical appraisal checklists

- **Centre for Evidence-Based Medicine**
  This organisation provides access to a range of resources in different languages, including critical appraisal checklists in Chinese, German, Lithuanian, Portuguese, Spanish, and Persian, and levels of evidence in French, and Japanese.
  https://www.cebm.ox.ac.uk/resources/ebm-tools/critical-appraisal-tools

Reporting guidelines

- **Enhancing the QUAlity and Transparency Of health Research (EQUATOR) Network**
  This site contains validated reporting guidelines for the main study types, including randomised trials, observational studies, systematic reviews, study protocols, case reports, guidelines, quality improvement studies, diagnostic studies, and economic evaluations, and qualitative research. Some of the reporting guidelines are published in German, Portuguese, and Spanish.
  https://www.equator-network.org/library/translations-of-reporting-guidelines/

Organisations supporting communities

- **Libraries without Borders**
  This organisation has tools for bringing libraries to the most vulnerable populations and resources to strengthen the capacity of communities. It includes 28,000 curated resources in 23 languages.
  https://www.librarieswithoutborders.org/

- **Translators without Borders**
  This is a non-profit organisation working towards a world where knowledge knows no language barriers.
  https://translatorswithoutborders.org/

Practical support for teams

- **EthnoMed**
  The objective of the website is to make information about culture, language, health, illness and community resources directly accessible to health care providers who see patients from different ethnic groups. EthnoMed was designed to be used in clinics by care providers in the few minutes before seeing a patient in clinic.
  http://ethnomed.org/clinical

- **Good practice guide to interpreting**
  This guide was produced to raise awareness of why interpreting is important and how to use an interpreting service correctly in health settings. It is available in Arabic, Bengali, Chinese, English, and Somali).
  http://www.migrantsorganise.org/?p=21539

- **Rules on sexual conduct for humanitarian workers**
  Translators without Borders has worked with the Inter-Agency Standing Committee (IASC) to help prevent sexual exploitation and abuse in humanitarian contexts. They have created a plain language version of the principles, available in 100-plus languages, to help aid workers and community members access the principles in their own language.
  https://translatorswithoutborders.org/psea-translated/

Tips for effective searching

1. Break down the question and identify the key concepts. For example:

   *What is the evidence of **communicable disease** and **infection control** in **areas of conflict**?*

   Three or four concepts should help find relevant evidence, but sometimes, the answer can be found by searching for just two concepts:

   - Concept 1 – could be the key population and/or setting
   - Concept 2 – might be the type of intervention or exposure
   - Concept 3 – perhaps a comparison of a second intervention
   - Concept 4 – refers to the final, expected outcome

Concept 1	Concept 2	Concept 3	Concept 4
communicable disease	infection control	*(optional)*	areas of conflict war zones

   Alternatively, you can also use a search framework to break down your search question and organise your terms. PICO is a common search framework, but it doesn't always suit public health searches, alternative frameworks can be found on City Library's [Alternatives to the PICO Model document](#) and more information can also be found in the short video: [Formulating an answerable search question](#).

2. Under each of the concepts, think of all the alternative terms that could apply to that original concept. Think about American terminology and spellings, or brand names. For example, in America, they call motor neurone disease, Amyotrophic Lateral Sclerosis. The technical name for Prozac is fluoxetine.

Concept 1	Concept 2	Concept 3	Concept 4
communicable disease infection infectious disease zika ebola cholera dengue fever plague	infection control prevention prophylaxis prophylactic antibiotic chemoprophylaxis	*(optional)*	areas of conflict war zones emergencies disasters relief work rescue work humanitarian crisis

3. Choose appropriate information sources, such as databases. For a good search, and depending on the topic, you should search at least three databases. There will be some duplication in results, but you will also find some unique records. When searching databases, search one database at a time and search for one term at a time. If you

search more than one database at a time, you will miss out on key features, such as the indexes described further on. If you search for one term at a time, you can then try out different combinations, until you get the results you are looking for.

4. There are two ways of searching databases. For best results, start with a subject heading search and combine with a free-text search:

   ➤ **thesaurus** (also known as index, MeSH or subject heading) searches - every article that is added to the databases is also tagged with a set of index terms, to help you find articles specifically on that topic. When you apply the thesaurus/index search, there will be an option to Explode results (exp), and this means that any narrower thesaurus/index terms will be included. It is good practice to explode terms in all cases, and then narrow down the search by combining with the other concepts. There is sometimes an option to choose Major topic or Focus, but these can be limiting. There is also an option to narrow down by Subheading. Again, it is good practice to keep the search broad, and include all Subheadings.

   ➤ **free text** (also known as natural language or keyword) searches – the database will search the whole text for the term that you have entered and no other variations. It will not look for similar terms, plurals, or spelling variations. Truncation (* or $) and wildcards (?) help to improve retrieval by expanding options, e.g. prophyla* will look for prophylaxis or prophylactic, while leuk?emia will retrieve papers containing the British and American spellings. You can also restrict your free text search to just title and abstract. The Help pages of a database will provide information on the correct symbols to use for truncation and wildcards.

5. For a comprehensive search, a thesaurus search should always be run together with a free-text search, in case the articles have not been indexed yet.

6. Search for each concept, one at a time, using free text and thesaurus search methodologies, combining with OR. Then, combine the total results of each concept with AND so that you find papers containing all the concept terms.

   To learn more about combining your search terms (as well as truncation and wildcards) you can view the video: Tips and tricks for search terms.

7. Once you have completed your search, you can limit search results by applying limits (language of article, date, age of population, publication type: e.g. RCT's, meta-analysis, reviews). There is an example of a search strategy overleaf.

8. If *too many* records are retrieved, go back over the strategy and narrow the search by using more specific or most relevant terms in Free Text and/or Thesaurus terms, or using Thesaurus search rather than Free Text or selecting specific subheadings with Thesaurus terms, or adding terms for other aspects of question (e.g. age or gender of patient), using AND or using limits.

9. If *too few* records retrieved, go back over strategy and widen search by using more terms: synonyms, related terms, broader terms (Thesaurus or Free Text), or adding in terms of related meaning with OR, or combining results of Thesaurus and Free Text searches or using the Explode feature of Thesaurus, which will include narrower terms, or selecting All Subheadings when searching for Thesaurus terms. You can find additional or related search terms from retrieved records:

   ➤ free text terms in the abstracts and/or titles that have not been included, but should

be;

> thesaurus terms that have not been included, but should be;

> references at the end of the paper.

10. Save your search with the name of the database and the date searched for future reference. This will help when you are reporting your search strategy. It is also worth keeping a copy of your search strategy, again for the writing-up stage of your research. To keep up-to-date, you can set up an alert so that each time another paper is added to the database that matches your search criteria, you will automatically be informed.

11. **REMEMBER:** *Take your time* building a search strategy isn't always easy and can often be the longest stage when running a search, particularly with systematic review searches. Don't worry about investing time in building a search strategy. It will be time well-spent.

Example of a search strategy:

Database: Ovid MEDLINE(R) and Epub Ahead of Print, In-Process
& Other Non-Indexed Citations, Daily, and Versions(R) <1946 to
July 27, 2018>
Search Strategy:
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1   exp Communicable Diseases/ (32434)
2   exp INFECTION/ (737701)
3   infectious disease*.tw. (67206)
4   exp ZIKA VIRUS INFECTION/ (2219)
5   exp Hemorrhagic Fever, Ebola/ (4367)
6   exp CHOLERA/ (8213)
7   exp DENGUE VIRUS/ (7589)
8   dengue fever.tw. (4061)
9   exp PLAGUE/ (4990)
10   or/1-9 (812436)
11   exp Infection Control/ (59105)
12   exp PRIMARY PREVENTION/ (139428)
13   prevention.tw. (473902)
14   prophyla*.tw. (149216)
15   antibiotic chemoprophylaxis.tw. (51)
16   or/11-15 (771984)
17   area* of conflict.tw. (246)
18   exp Warfare/ (35611)
19   war zone*.tw. (537)
20   exp EMERGENCIES/ (38300)
21   exp DISASTERS/ (68551)
22   exp Relief Work/ (4413)
23   exp Rescue Work/ (1976)
24   (humanitarian adj (crisis or crises or effort*)).tw. (366)
25   or/17-24 (102618)
26   10 and 16 and 25 (744)
27   limit 26 to (english language and last 5 years) (117)