Module 2: Accessing Evidence

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Module Objectives

At the end of this module participants will:

- Know tips for engaging with researchers to enable access and use of evidence
- Identify relevant high-quality search engines/databases for conducting searches
- Explain steps in a search strategy
- Know Boolean search terms and tips for searching the internet
- Identify search terms and relevant sources for searching for their policy question
- Describe characteristics of quality sources of evidence
- Demonstrate effective searching, assessment of sources, and development of components of their own search strategy

Decision-making and "ways of knowing"

Decision-making is "the process of examining your possibilities and options, comparing them, and choosing a course of action." Making decisions in a policy context is a complex process influenced by many different kinds of information, priorities, and contextual factors. A fair amount of research has been conducted on the barriers and challenges associated with using research. Although there is much talk about evidence-informed policy, research evidence has to compete with a range of additional factors that influence decisions about what will become policy. These factors may include experience, expertise, judgment, values, resources, habits and traditions.

One schema highlights three different ways of knowing:

- Empirical knowing the most explicit form of knowing, which is often based on quantitative or qualitative research study;
- Theoretical knowing which uses different theoretical frameworks for thinking about a problem, sometimes informed by research, but often derived in intuitive and informal ways;
- Experiential knowing craft or tacit knowledge built up over a number of years of practice experience.

- Source: Nutley, S. (2013). *What Counts as Good Evidence*? <u>http://www.alliance4usefulevidence.org/assets/What-Counts-as-Good-Evidence-WEB.pdf</u>

Where to Find Evidence

1. Linking up with Researchers

As part of sourcing research evidence for use in decision-making, policymakers require skills in building a network of experts, recognizing and engaging expertise and being able to understand their contribution. Academics can be helpful in a number of ways including:

- Ensuring policy decisions are based on the most up to date information
- Enabling innovation in policy by bringing a range of valuable external viewpoints and fresh perspectives
- Bringing extra rigor to decisions, as they can ask and answer difficult questions and challenge and defend complex answers
- Bridging skills gaps in specialist analytical and data handling roles

Tips for enabling meaningful relationships with researchers and research institutions

- Make an effort to know the main researchers in your area of interest their names, institutions where they work and their positions, telephone number, and email
- Make initial contact drop them an email asking them to share any new research they are generating, and to keep you abreast of their new findings whenever these emerge
- Inform them of the key policy issues that you wish their research could answer
- Involve them in policy-making processes
- Request them to involve you in their conferences, meetings and research studies
- Attend key scientific conferences in your area of interest
- Subscribe to receive regular newsletters and other publications of the research institutions in your area of interest

2. Top Tier Repositories and Databases for Research Evidence

It varies by subject of course, but generally speaking, many participants in this training work in health and can feel comfortable knowing the following databases are considered by librarians and knowledge management specialists to be **top tier** – your "go to" repositories for evidence in the health field.

Working with or through a librarian or knowledge management specialist can be a benefit to not only one's time, but also the quality of the search. They have more experience with searching and literature repositories. They may also have access to databases that have fees or subscription costs.

Universities and some NGOs may have librarians who can help. Also, some repositories and databases have online technical support.

There are many more top tier databases depending on what you are looking for, but below is a more detailed information about 10 commonly used databases or search engines.

Note that all of these databases or engines have FAQs, how to search, and tutorials.

1. African Index Medicus (AIM) (<u>http://indexmedicus.afro.who.int/Journals/Indexj.html</u>) - The WHO, in collaboration with the Association for Health Information and Libraries in Africa (AHILA), has produced an international index to African health literature and information sources. This index is called African Index Medicus (AIM). Printed knowledge generated in African countries is given global exposure in the AIM. It promotes African publishing by encouraging writers to publish in their country or regional journals, whereas now scientists and researchers in developing countries are competing for publication space in the few worldwide "prestigious" journals.

2. **The Cochrane Library** (<u>www.Cochrane.org</u>) is published on behalf of the Cochrane Collaboration and strives to improve healthcare decision-making through systematic reviews of research on the effects of healthcare interventions. See Text Box 1 below for definition of systematic reviews and why they are preferred in evidence-informed policy-making. The Cochrane Collaboration identifies the strongest studies addressing a given issue, helping researchers and policy-makers to separate reliable information in properly done studies from less reliable or rigorous information. Cochrane Collaboration Library's five databases include:

- Database of Systematic Reviews extremely rigorous
- DARE (Database of Abstracts of Reviews of Effectiveness) well-done reviews by others
- Controlled Trials Registry database of controlled trials, much smaller than Medline

- National Health Service (NHS) Health Technology Assessment Database summaries of Health Technology Assessments
- NHS Economic Evaluation Database appraised summaries of economic evaluations

3. **HINARI** (http://www.who.int/hinari/en/) -- HINARI Access to Research in Health Program provides free or very low cost online access to major journals in biomedical and related social sciences to local, not-for-profit institutions in developing countries. Up to 13,000 journals (in 30 different languages), 29,000 e-books, 70 other information resources are now available to health institutions in more than 100 countries, areas and territories, benefiting many thousands of health workers and researchers.

4. **POPLINE**® (<u>www.popline.org</u>) -- contains the world's most comprehensive collection of population, family planning and related reproductive health and development literature. An international resource, POPLINE helps program managers, policymakers, and service providers in low and middle income countries in development-supportive agencies and organizations gain access to scientific articles, reports, books, and unpublished documents. POPLINE is a free resource, maintained by the Knowledge for Health (K4Health) Project at the Johns Hopkins Bloomberg School of Public Health/Centre for Communication Programs and is funded by USAID.

From a librarian: "Information searches in Pubmed and Popline are great but can be overwhelming. Have patience!"

5. **PubMed** (<u>www.pubmed.gov</u>) -- comprises more than 24 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites. National Center for Biotechnology Information, US National Library of Medicine host PubMed.

6. **Research4Life** (<u>http://www.research4life.org/</u>)--is the collective name for four programs –HINARI, AGORA, OARE and ARDI– that provide developing countries with free or low cost access to academic and professional peer-reviewed content online. Eligible libraries and their users benefit from online access to over 44,000 peer-reviewed international scientific journals, books, and databases; full-text articles which can be downloaded for saving, printing or reading on screen; searching by keyword, subject, author or language; resources available in several languages; training in information literacy and promotional support. Research4Life is a public-private partnership of the WHO, Food and Agriculture Organization, UN Environmental Program, World Intellectual Property Organization, Cornell and Yale Universities and the International Association of Scientific, Technical and Medical Publishers.

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7. World Health Organization (WHO) resources (http://www.who.int/en/) -- The WHO has a wide range of information resources on global and country-specific health issues. Specific resources can be found in_WHO's *Global Health Observatory* (http://www.who.int/gho/en/) and Publications (http://www.who.int/publications/en/) pages. The Observatory contains disease statistics, data repository, and analytical reports on global priority health issues.

8. **Google Search** (<u>www.Google.com</u>) -- commonly referred to as Google Web Search or just Google, is a web search engine owned by Google Inc. It is the most-used search engine on the World Wide Web, handling more than three billion searches each day. The order of search on Google's search-results pages is based, in part, on a priority rank called a "PageRank". Google Search provides many different options for customized search, using Boolean and other options specified in a different way on an advanced search page.

The main purpose of Google Search is to hunt for text in publicly accessible documents offered by web servers, as opposed to other data, such as image or database search. Google Search provides several features beyond searching for words.

From a librarian: "Using general Internet search engines such as Google to identify potential studies may be a good resource as these may be used to retrieve current (both published and unpublished) studies. Google will have more grey literature.

9. Google Scholar (<u>https://scholar.google.com/</u>)-- is a freely accessible web search engine that indexes the full text of scholarly literature across an array of publishing formats and disciplines. Google Scholar index includes most peer-reviewed online journals of Europe's and America's largest scholarly publishers, plus scholarly books and other non-peer reviewed journals. It is estimated to contain roughly 160 million documents.

From a librarian: "Google Scholar is good because it is peer reviewed. Both Google and Google Scholar will give you a lot (neither is indexed, that is read by staff who apply index terms to the articles) – and you'll have duplicates between them. These two are simply matching your terms – so you may have to put in a lot of different terms. That is, you can't assume 'vaccine' will get everything vaccine related term (e.g. vaccines, immunize, immunizations). You have to put in all possible alternatives."

10. **Development Experience Clearinghouse (DEC)** (<u>https://dec.usaid.gov/dec/home/Default.aspx</u>) -- USAID's DEC is the largest online resource for USAID-funded technical and project materials; makes nearly 200,000 items available for review or download, and continuously grows with more than 1000 items added each month. The DEC holds USAID's institutional memory, spanning over 50 years; including documents, images, video and audio materials. The DEC collects research reports, evaluations and assessments, contract information, tutorials, policy and planning documents, activity information sheets, and training materials.</u>

Textbox 1. What are systematic reviews and why are they preferred in evidence-informed policy-making?

A systematic review is defined as "a review of the evidence on a clearly formulated question that uses systematic and explicit methods to identify, select and critically appraise relevant primary research, and to extract and analyse data from the studies that are included in the review." (NHS Centre for Reviews and Dissemination 2001).

Systematic reviews can be invaluable for evaluating available evidence in a methodical manner and providing a critical summary of strength and direction of evidence. They attempt to answer a specific question by systematically searching for, appraising, and synthesizing the results of all relevant studies.

Systematic reviews are preferred in evidence-informed policy-making (EIPM) because they not only provide a meticulous way of finding relevant, high quality studies, but also integrate the findings of these studies to give a clearer and more comprehensive picture of an issue than any single study can do (Gough et al 2013). Systematic reviews enable policy-makers to establish what is known from research, but also what is not known from research (ibid).

Evidence generated by a systematic review is much stronger than evidence generated from the traditional literature review since systematic review focus on ensuring a comprehensive review of all existing literature on the issue, and they also appraise the evidence.

Advantages of a systematic review include that they:

- Systematic reviews reduce the risk of bias in selecting studies and interpreting their results.
- They reduce the risk of being misled by the play of chance in identifying studies for inclusion, or the risk of focusing on a limited subset of relevant evidence.
- They provide a critical appraisal of the available evidence and place individual studies or subgroups of studies in the context of all the relevant evidence.
- They allow others to critically appraise the judgments made in study selection and the collection, analysis, and interpretation of the results.
- Resolve controversy between conflicting studies
- Identify gaps in current research

Limitations of a systematic review include that:

- The results may still be inconclusive
- There may be no evidence
- Existing evidence may be of poor quality

Given their comprehensiveness, systematic approach, and critical appraisal of evidence, systematic reviews are preferred in EIPM as opposed to single studies. Policymakers are therefore encouraged to prioritise systematic reviews where they are available in informing policy decisions.

Even then, it is important to note that systematic reviews are only as good as the evidence that they summarize. Like primary research, they are susceptible to bias and error, and it is important to appraise the methods before putting any trust in the results (see Chapter 5 on appraising systematic reviews).

Meta-analyses are often confused with systematic reviews. Meta-analysis (see Table 10) is a method of statistically combining results from several selected studies in order to develop a single conclusion that has greater statistical power. If the individual studies utilized randomized controlled trials (RCT), combining several selected RCT results would be the highest-level of evidence on the evidence hierarchy (see Figure 11), followed by systematic reviews, which analyze all available studies on a topic.

The Search Strategy

Conducting an evidence search puts you even deeper into a state of managing and evaluating a huge volume of information. To reiterate that point, we know that Internet and database searches can generate a large amount of potentially useful information.

Whenever possible, work with or through a librarian or knowledge management specialist. They have more experience with searching and literature repositories. Universities, academic institutions and some NGOs may have librarians who can help. They may also have access to 'paid-for' databases that you may not have access to.

The search strategy is often talked about in 'information literacy' instruction. It can be a formal tool you use or it can be less formal and refer to the steps one takes when launching and revising their information search.

Developing a search strategy is an iterative process in which the terms that are initially used may be modified based on what has already been retrieved. There are diminishing returns for search efforts, that is, after a certain stage, each additional unit of time invested in searching returns fewer references that are relevant to the review.

You can limit by dates and language and country area. Generally, you would not limit when starting. Do not limit at all if doing a systematic review. If you really want to be comprehensive, do not limit to language but you may have to translate.

Note that you can get more "bang for your buck" if you search for literature which is tagged as "review" or "systematic review". In this way, you can access information that has already been compiled and evaluated. Similarly, you can use databases comprised only of systematic reviews like Cochrane or Campbell.

8 basic steps for conducting a search strategy

These are the 8 basic steps of conducting a Search Strategy:

1. **Define your information need.** Try to put what you are looking for in the **form of a question** because that will focus your need and define relationships. It gets to what are you really trying to find out? We did this in the last session.

The structure of a search strategy should be based on the main concepts being examined in a review. Generally speaking, a search strategy to identify studies will typically have three sets of terms: 1) terms to search for the condition of interest, i.e. the population; 2) terms to search for the intervention(s) evaluated; and 3) terms to search for the outcomes (optional).

2. **Decide on potential sources** – which databases? Published or unpublished or both? Once decisions have been made regarding which databases will be searched, the following key decisions will need to be made:

- What limiting features are available to target primary studies only (for example, use of Document Type codes). Keywords such as "study" or "studies" or "control group" may be used to limit the results to empirical research.

- The study designs that will be included, if that's a need.

- Any geographic considerations

- The time period that you are interested in (keeping in mind that retrieval tools have different beginning dates and may not index very old material)

- Language of publication that is to be included

3. Identify search terms and cluster them. Brainstorm all the terms that could be used in your question. Look at any references that appear to be right on target and see what terms there are that they use. Group terms and decide how to **put terms together**, that's where the question will help you. What Boolean operators should be used and how should they be logically arranged?

We'll discuss Boolean terms next. Decide what keywords should be truncated?

4. Launch your Search – start wide and keep refining.

5. List your search Results.

6. Evaluate. Look at what you're getting. If you get nothing helpful, there may be a couple reasons: there may be not much out there, your terms are wrong, or the relationships are not right. Go back and try again if not getting what you want.

7. Record your Search Strategy. Recording your search strategy is a good practice even if you are not writing a manuscript or conducting a systematic review (where it would be a requirement). Recording the basic fields of information in your strategy is not necessarily for reporting but to help you know what you have already done and what you still intend or need to do. This helps you and/or your collaborating colleagues to not repeat work and is particularly helpful if the search effort extends over many months or is done by more than one person.

The following summary can be used to guide recording your search strategy.

- List search terms
- List all databases searched
- Note the dates of the last search for each database AND the period searched
- Note any language or publication status restrictions
- List grey literature sources
- List individuals or organizations contacted
- List any journals and conference proceedings specifically hand-searched for the review
- List any other sources searched (e.g. reference lists, the internet).

8. Document your references. You can use an Excel spreadsheet or even a Word document to collect and organize your references. Reference manager software makes this task much easier and enables you to add notes to references, cite your references and create bibliographies more easily. There are many programs available. Some free ones are Zotero, Mendeley, and basic versions of Endnote (Endnote Online).

Some things to consider when choosing a reference manager software are:

- a. What your colleagues use. It's easier to collaborate if you're using the same software as people you work closely with
- b. Is it compatible with your operating system? This could be a huge help as not all the reference managers are compatible with all the operating systems so this could help you narrow down the field quite quickly.
- c. Have a look at the screen shots on the website of the individual reference manager. Don't like what you see? Use something else. If there are no screen shots or no video tour, this is also a bad sign and may show things are getting a little out of date!
- d. Type the name of the reference manager into You Tube. If there are loads of how-to videos this is a good sign, if there aren't, forget about it.
- e. Use Google type the name of your reference software followed by review or forum and see what kind of results you get back.
- f. Twitter Does the site have a twitter page? If so try and spark up a conversation. Being active on twitter is normally a sign that they are open and responsive to customer feedback.

For Managing References, see also: Oxford LibGuide with pros and cons of various programs used for managing references: http://ox.libguides.com/content.php?pid=294548&sid=2418329

Search Strategy Template

1. List search terms	
2. List all databases that you plan to search	
3. Note the dates of the last search for each database AND the period searched	
4. Note any language or publication status restrictions	
5. List grey literature sources	
6. List individuals or organizations contacted	
 List any journals and conference proceedings specifically hand- searched for the review 	
8. List any other sources searched (e.g. reference lists, the internet)	

Identifying Search Terms

Step 1. Using Mind Maps

A great tip for brainstorming and organizing terms is to use a mind-map to structure the information. Mind-maps were championed by Tony Buzan as a flexible, organizational tool that uses a visual format to link words, ideas, tasks or other concept items together. Usually mind-maps are developed around a central theme, with linked words (etc.) arranged radially around the central theme. It is an image-centered diagram that represents the semantic connections between portions of information.

By presenting these connections in a radial, non-linear graphical format, it encourages a brainstorming approach, eliminating the hurdle of initially establishing an intrinsically appropriate or relevant conceptual framework to work within. Mind maps record the information in the same way that our brains' structure and store information through linked associations. You may find that a mind-map will help you to define your search question, as well as identify the terms associated with the chosen topic. Mind-maps are flexible so you can include different branches for alternative spellings or related terms.



Mind-maps are a great way of identifying what you already know about a given topic, and can expand in detail as your understanding of a specific domain increases. Once you have mapped the information landscape, around a specific topic or research question, you can transfer this information into a concept cluster and then concept tables.

Step 2: Concept Clusters

Once you have an idea of the areas you are interested in, taken from the mind map, start to cluster these into specific areas and also look for other terms that could be used to describe these areas. These terms are your search keywords, which you will eventually use to formulate a search strategy for locating information.

Concept clusters enable you to group related terms around a specific theme. These may be concepts or terms that are taken from one branch of the mind-map. Concept clusters are collections of related concepts, ideas or terms.

Step 3. Concept Tables

The next step is to transfer clustered terms/phrases into concept tables to create a list of terms that you will use for searching.

Take the concept 'clusters' and place them into a search/concept table as shown below. By creating a list of terms you can begin to develop a search strategy.

Key concept 1 Health	Key concept 2 Malawi	Key concept 3 Family Planning
Diseases	Lilongwe	Family Planning Methods
HIV AIDS	Republic of Malawi	Natural Family Planning
HIV AIDS Prevention	Southern Africa	Family Planning services

Clustered terms positioned within a concept table will help you to formulate a search strategy. By listing the concepts in a separate cell (under an umbrella term), you can begin to combine terms to create a search strategy. This technique is a great way to systematically record the combination of terms used in your search strategy.

Once you have gathered all the concepts together in the table, you can begin to combine terms to create 'meaningful' search queries that respond to your search question. In this example, the terms "HIV AIDS", Nairobi and "Family Planning services" have been combined. Note that combinations of keywords e.g. HIV AIDS have been enclosed in speech marks. This may or may not be necessary in all databases or search engines.

Boolean Terms Primer

Using Boolean operators (AND, OR and NOT)

Tip: AND and OR are the two most important.

Boolean searching uses commands (operators) such as AND, OR, NOT. A search strategy should build up the controlled vocabulary terms, keywords, synonyms and related terms for each concept at a time, joining together each of the terms within each concept with the Boolean 'OR' operator .

This means articles will be retrieved that contain at least one of these search terms. Sets of terms should be developed for the population or condition, intervention(s) and outcome (optional). These three sets of terms can then be joined together with the 'AND' operator.

This final step of joining the three sets with the 'AND' operator limits the retrieved set to articles of the appropriate study design that address both the population or condition of interest and the intervention(s) to be evaluated. A note of caution about this approach is warranted however: if an article does not contain at least one term from each of the three sets, it will not be identified. For example, if an index term has not been added to the record for the intervention and the intervention is not mentioned in the title and abstract, the article would be missed. A possible remedy is to omit one of the three sets of terms and decide which records to check on the basis of the number retrieved and the time available to check them. The 'NOT' operator should be avoided where possible to avoid the danger of inadvertently removing from the search set records

AND - just the part is intersected

OR

NOT – do sparingly. Will kick it out if mentioned.

Tips on terms:

- When using web search engines, search strategies should be entered into the Advanced search screen as this allows the searcher to easily use Boolean logic and limiting commands through the use of menus.
- Quotation marks searches for that exact phrase.
- Sometimes Boolean operators must be entered in capital letters (e.g. Synergy).
- Different search tools may use OR or AND as a default setting
- Truncation
- Wildcard searches

Illustrating how the Boolean Search Operators function



Source: Adapted from DeVry University South Florida Camous Community Website, n.d.

Tutorials:

- Introduction to Boolean Logic: <u>http://www.nlm.nih.gov/bsd/disted/pubmedtutorial/020_350.html</u>
- Information Retrieval Education Resources: <u>http://ir.exp.sis.pitt.edu/res2/view.php?rid=85</u>

Google Search Tags

The Google search tag 'site+colon' can be used locate evidence from a specific online database. For instance: if you type in the search query 'site:thecochranelibrary.com vaccines children' (note there is no space between the colon and the URL of the website), then you will locate resources about vaccines for children only from the Cochrane library. The formula for the search query is as follow:

- 1. Use the site: tag and follow it with the website address (i.e. URL). There should be no space between the colon and the website address. This is a very important point, if you leave a space between site: and the website the search query will not work.
- 2. Also note you do not need the 'www' in front of the website address
- 3. You can list your terms after the website (leave a space between the website address and terms)
- 4. Google will understand that keywords placed beside each other are combinations of terms in others words the Boolean 'AND'
- 5. If a keyword must be included in the results you can use a + symbol before the term (this applies with or without the site: tag) e.g. no space e.g. +vaccines
- 6. If you want to exclude a term you should use the '-' symbol in front of the keyword (no space e.g. -vaccines)

To combine keywords in a particular order then enclose them in speech marks e.g. "immunization programs"

Assessing Source Credibility

We will address evaluating studies and content in the next section on Appraising Evidence. Now, we'll discuss ways to evaluate **the source** of the evidence.

It is very difficult for policymakers to check all the evidence available to them therefore they often rely on the reputation of its source and/or journal ranking as proxies for quality.

Proxy for quality #1: reputation

The source of the evidence is sometimes as important as the evidence itself. Another way to assess quality of knowing whether or not the manuscript comes from a reputable source. Because your source is Cochrane, for example, you can have a certain amount confidence about the credibility of the evidence. But they can make mistakes too.

Proxy for quality #2: journal rankings

Journal ranking systems can provide an indicative proxy guide regarding the scrutiny with which an academic study has been subjected prior to publication. The principal journal ranking system is the 'Impact Factor' rating. Journals often publish their Impact Factor ranking somewhere on their website.

You can also look at the Impact Factor rating for a particular journal – the higher the number then belter. It's the measure of how many times the average article has been cited in the last two years. It tells you if

people are using it to write about other things. It's good but not to be oversold. It doesn't inform you if people are using a particular program or intervention <u>but not writing about it</u>. Also, a <u>new</u> journal may be great but it won't have an impact factor because it's not on the playing field yet (remember the Impact Factor using a two year time period for measurement.)

Not all well designed and robustly applied research is to be found in peer reviewed journals and not all studies in peer reviewed journals are of high quality.

Journal rankings do not always include publications from southern academic organizations or those that feature in online journals, so a broad and inclusive approach is required to capture all relevant studies. For more information on this, read the two publications below, which are also included in this folder:

1. DfID's How to Note: Assessing the Strength of Evidence (available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/291982/HTN-strength-evidence-march2014.pdf

2. Searching for studies: Information retrieval methods group policy brief (available at: http://www.campbellcollaboration.org/artman2/uploads/1/C2_Information_retrieval_policy_brief_new_dr aft.pdf

Additional Resources and Useful Links

How to submit your website to Google http://googlewebmastercentral.blogspot.co.uk/2008/12/sitemap-submission-made-simple.html

How to set up a Google Alert http://www.google.com/alerts

VIDEO: How and why: Google profile as a scholar and student https://www.youtube.com/watch?v=Hvqxbiq3eHM

More Google Search Tips and Tricks https://www.google.com/search/about/

Full list of Google Search commands http://www.searchcommands.com/google/

'Maximizing the Impacts of Your Research' by the London School of Economics http://blogs.lse.ac.uk/impactofsocialsciences/the-handbook/

Google Scholar – Search page http://scholar.google.com

How to set up a profile on Google Scholar and check your citations <u>http://scholar.google.co.uk/intl/en/scholar/citations.html</u>

VIDEO: Tracking my citations in Google Scholar http://www.youtube.com/watch?v=_gH5kjVtc1o

How Google calculates the h-index of publications

http://scholar.google.co.uk/intl/en/scholar/metrics.html

11 Google Tricks That Will Change the Way You Search http://time.com/3581399/google-search/?utm_content=buffere9cca

Illustrative Case Study

Illustrative Case Study for Evidence Use in Decision-Making

This case study provides a topic of public health interest as a scenario to refer to throughout the course. Though the evidence outlined within the case study is real, some portions of the case study exercise are hypothetical (e.g., being asked by a superior to do something). The case study content is organized in a way that will allow participants to demonstrate the various practical skills involved in evidence-based decisions and policy making as applied to one consistent theme and scenario.

Exercise: Accessing Evidence

What terms might you use in your search that would result in relevant research and evidence about family planning and HIV integration?

Terms relevant for the search strategy template and practice: family planning and HIV integration, contraception and HIV, family planning for people living with HIV, unintended pregnancy in women living with HIV, integrated family planning programs, family planning and (VCT, ART, PMTCT). Participants will know they are on the right track if the results they find are listed on Page 11-13 of the accompanying brief.

Module Evaluation

You will be asked to provide feedback on the comprehensive training at its close. In addition, offering comments on the specific modules as we go along will help us to identify areas where improvements can be made, potentially even mid-training. Your comments are very helpful.