

Appraising evidence

UJ-BCURE



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How is this relevant to you?

USE THIS SLIDE TO PROVIDE AN OVERVIEW OF THE RELEVANCE OF EVIDENCE-INFORMED DECISION-MAKING TO YOUR AUDIENCE IN THE CONTEXT OF THIS SPECIFIC WORKSHOP

NOTE THAT THERE ARE TWO ACCOMPANYING HANDOUTS FOR THIS MODULE: ONE IS A GENERAL OVERVIEW, ONE RELATES TO THE EXERCISE ON SLIDE 18.

Introduction to BCURE

- BCURE = Building Capacity to Use Research Evidence
- A three year programme of work funded by UK's Department of International Development (DFID)
- Focuses on increasing the use of research in decision-making through capacity-building
- Investment is mostly in the decision-makers
- Focus is on supporting governments through civil society capacity building rather than research

Exercise: What is evidence?

- Participant sharing – What is evidence in your world?
 - Each participant shares with their neighbour what they understand by evidence (could be data, information, numbers, policies, qualitative, quantitative, etc.)
 - A handful of participants are asked to share with the wider group (continue until a wide variety has been shared)
- Trainers sharing – What is evidence in our world?
 - We also have different backgrounds
 - Rigorous research evidence such as systematic reviews
 - First finding, appraising, and using what has been done before commissioning new research
 - Using the best, rigorously applied methods to address the question

A cycle of EIDM

- Implementation / action

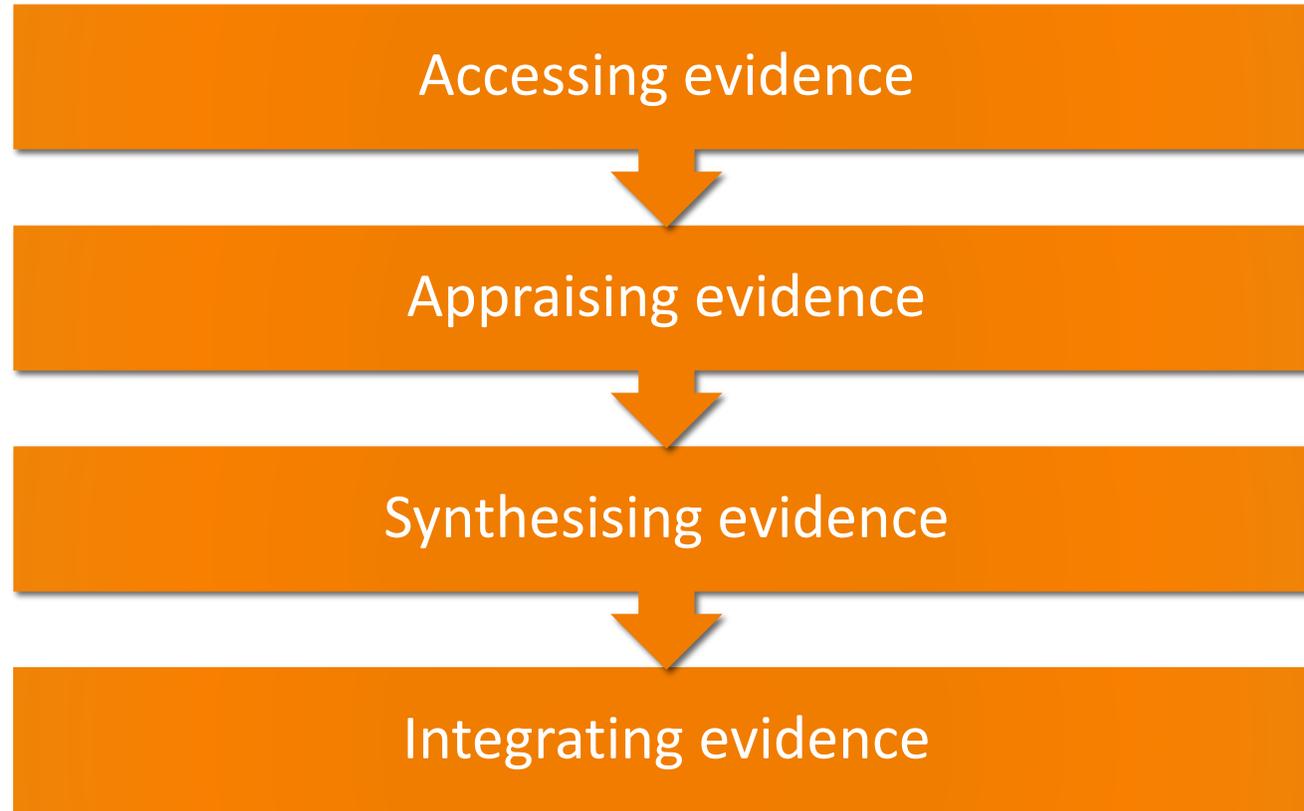
- Monitoring, evaluation, and research



- Evidence-informed decision-making

- Reviewing the evidence

Steps towards EIDM



We do not treat all evidence the same

- In our daily encounters, do we treat all information the same?
 - Example: an article from Daily Sun vs Mail & Guardian
- In our professional encounters, is all received information of same the quality? Is it all equally relevant?
- Questions for discussion:
 - Which pieces of evidence do I usually access?
 - What makes me trust this evidence?
 - Why am I more confident in this type of evidence than other types?
- Encountering monitoring, evaluation, or research evidence is no different

Assessing the quality of evidence

- If policy is influenced by evidence, the quality of the research has an impact on the quality of the policy
 - Example: Social grants in South Africa; good research contributes to good policy
- But, some evidence is not very trustworthy (reliable)
 - Untrustworthiness referred to as 'bias'
- Biased evidence can be misleading: over-estimates impact, fabricated findings, unethical
 - Example: Tamiflu / rape statistics claims in South Africa
- Implications of using low quality evidence in decision-making
 - Policy is open for criticism; wasteful expenditure; higher chance to have no impact or inflict harm
- Need for a systematic and transparent way to assess the quality of evidence: quality appraisal (critical appraisal / risk of bias assessment)

Tools for appraising evidence

- Tools exist for different
 - Forms of research (quantitative/qualitative)
 - Organisations (policy/researcher)
 - Levels of familiarity with research appraisal

Key principles for appraising evidence

- Guiding principals of relevance & rigour (quality / reliability)
 - Relevance in terms of our question (fit for purpose)
 - Rigour in terms of how much we trust the study
- Relevance & rigour are assessed on
 - Evidence design
 - Evidence conduct
 - Evidence analysis
 - Evidence conclusions

Types of evidence for questions (1)

■ What is happening?

- E.g., how many children attend school?
- These questions are usually addressed using routine monitoring data

■ What do people think?

- E.g., is the community going to accept this?
- Measuring or evaluating perceptions
- These questions can be addressed using qualitative or quantitative research methods

■ What works?

- E.g., what works best / better? What doesn't work? How effective is this approach?
- These questions can be addressed using evaluations and quantitative research which measure the impact of X on particular outcomes

Types of evidence for questions (2)

■ How and why?

- E.g., why is this not working? How do we make this work?
- These questions can be addressed using evaluations, and qualitative and quantitative research that assesses processes and mechanisms that lead to change, whether that change is positive or not

■ Cost questions

- E.g., how much will this cost? Was it value for money? Is funding available for this?
- These questions can be addressed using monitoring, evaluations, and research focused on the utilisation and management of funds and what outcomes are achieved (cost effectiveness links costs questions with what works questions)

Exercise: Relevance

- In groups, discuss a policy topic that you are currently working on
- State three questions that have always concerned you about the policy
- Can you identify what types of questions you are asking?
- Can you think of what type of evidence might be relevant / irrelevant to your question?

Rigour in evidence design

- Research methods should be able to answer the study question
- Not every method is appropriate for every question
- Look out for:
 - An explicit statement of study question, objectives, and applied methods
 - Descriptions of research setting / sample
 - Proof that data was generated and analysed by the study (no data = opinion-based research)

Rigour in evidence conduct

- The report should provide a systematic and transparent account of the research process
- Look out for:
 - Change of protocol (did authors do what they said they would do?)
 - Was the research consistent?
 - Was the conduct professional?

Rigour in evidence analysis

- The study should provide well-founded and plausible arguments based on the evidence generated
- Look out for:
 - Missing data (e.g. is the sample the same from baseline to end-line?)
 - Have all potential analyses explored been reported (e.g. simple difference vs difference in difference?)
 - Were reported findings selected from a number of competing analyses (e.g. did authors pick the analysis most likely to support their findings?)

Rigour in authors' conclusions

- The claims of the authors should make sense and be aligned to the type of study and data available
- Look out for:
 - A clear link between the data and the conclusions / recommendations (be wary if you think they have jumped to conclusions)
 - The amount of data in proportion to the magnitude of the claim (be wary if you find only one or two quotes supporting a strong conclusion)
 - Reflexivity (be wary if the authors don't explain the limitations of their study)
 - Context (be wary if there is no background information on the study setting and participants)

Exercise: Quality appraisal

- Please refer to the handout linked to this exercise
- In groups, try to assess one of the provided evidence extracts
 - You can use the guidelines if you wish
 - Think about different ways of expressing your assessment
- Answer whether you would trust this evidence to inform your decisions?

Expressing and using your appraisal findings

- Overall: given your assessment, how much can you trust the evidence?
- What is the next step: threshold, weighting?
- Reporting of quality appraisal should be transparent
- To save time in policy context, consider the idea of **fatal flaws** (Dixon-Woods et al 2006)
- Question: What fatal flaws would you want to look out for?

The politics of bias

- Weight of the evidence vs contestation and magnitude of the policy question
- Appraisal in the context of policy-making needs to be aware of the sensitivity of the research question
- Be aware of real world sources of bias:
 - Departmental group-think
 - Research conducted by established consultant
 - Media pressure
- Can you think of any other real world sources of bias?

Contact details

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Useful Resources

■ Manuals:

- Appraisal of Guidelines for Research & Evaluation (AGREE)
- Critical Appraisal Skills Programme (CASP) has checklists for appraisal (quantitative / qualitative)
- DFID (2014) Assessing the strength of evidence. 'How to' note
- ODI (2006) A toolkit for progressive policymakers in developing countries
- Spencer et al (2006) Quality in Qualitative Evaluation: A framework for assessing research evidence (Appraisal tool for qualitative data)

■ Websites:

- Coalition for Evidence-based policy (checklists, videos, seminars, etc.)
- Evidence for Policy and Practice Information and Coordinating Centre (EPPI-Centre)

■ Book:

- Gough D et al (2012) An introduction to Systematic Reviews.

References

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