

Evidence-informed
Health Promotion and Public
Health:
Encouraging the use of research
in practice

30 October, 2006
EPPI-Centre, Social Science Research Unit
Institute of Education



Welcome



Agenda

- Welcome
- Methods for encouraging research use: An introduction
- Case study: Queensland Health
- Structured discussion
- Summary
- Conclusions
- Tea & Coffee



(3)

Aims of seminar

- To outline a **range of ways** in which research can be brought into practice, with a **focus on educational methods**
- To **illustrate using a case study** of one training/education-based method recently evaluated in Australia
- To **provide a forum** for the exchange of ideas and experiences about the barriers to, and facilitators of using research evidence in health promotion/public health



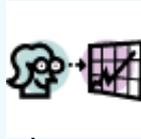
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What do we know about getting research into practice?

Barriers



Some (limited) evidence for what works



Range of proposed mechanisms and solutions



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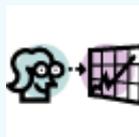
What do we know about getting research into practice?



Oliver S, Peersman G, Oakley A, Nicholas A (2001) Using research: challenges in evidence-informed service planning. In: Oliver S, Peersman G (eds) *Using Research for Effective Health Promotion*. Buckingham: Open University Press, pages 96-108.



Nutley SM, J Percy-Smith and W Solesbury (2003), *Models of research impact: a cross-sector review of literature and practice*, *Research Report*. London: Learning and Skills Research Centre



Walter I, Nutley S, Davies H (2005) What works to promote evidence-based practice? A cross-sector review. *Evidence & Policy* 1(3):335-364



(6)

Promoting Health After Sifting the Evidence (PHASE) workshops

1996, Series of 5 x 5 hr workshops

- Collaboratively designed
- Structure
 - introduced key concepts
 - small group critical appraisal & whole group reflections
 - discussion of critical appraisal in own workplace
 - evaluation
- Appraisal of trials, a systematic review and an evaluation proposal



(7)

PHASE: some responses

'I thought I would learn about good practice, not the process of how to find good practice - nevertheless this is beneficial and I think I learned this.'

'People want critical appraisal done for them, not to do it themselves - some people struggle with the conceptual understanding and the statistics.'

'I often find myself in the position of asking questions like these... and ...not really having the time/ resources/ skills to look for answers'

'I think most health promotion staff have skills to appraise an article. What is needed is an overview of evidence in specific areas eg smoking... a consensus on what can be taken from it and therefore identified programmes.'

'[We need] an environment where evaluation is supported. At the moment all good intentions are hopelessly unrealistic.'



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Commonly identified barriers



Research

- Inconclusive
- Not relevant to practice concerns
- Poorly communicated
- Implications for practice not clear

People and organisations

- Lack of time to engage with research
- Competing, more pressing priorities
- Individual resistance to research
- Hostile culture



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Proposed mechanisms/solutions



Dissemination

Facilitation



Education



Reinforcement



Social influence



Incentives



Collaboration



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Features of effective practices to increase research impact



Research

- Must be translated for specific contexts
- Benefits if
 - strong evidence
 - from trusted source
 - endorsed by opinion leaders

Individuals/ organisations

- Integration of research activities within existing systems
- Understanding and targeting specific barriers to/ enablers of change
- Organisational leadership
- Support – financial, technical, emotional
- Personal contact with key individuals, enthusiasm

(11)



Case study: Queensland's Evidence-Based HP & PH workshops

Dr Philip Baker, Senior Epidemiologist
Queensland Health, Australia

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Outline of the presentation

1. Who we are
2. Where we were are
3. How we got started providing training
4. Contents and structure of the workshops
5. End-of workshop evaluation (1)
6. Follow-up evaluation (2)
7. What we have learn, recommendations



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Population Health Services, Queensland Health

- Ministry for Health
- 3 area health service areas (Southern, **Central**, Tropical), each comprising of several Population Health Units
 - Health Promotion
 - Public Health Nutrition
 - Environmental Health
 - Communicable Disease Control
 - Health Surveillance and Epidemiology



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Queensland, Australia

- 4+ million people, Australia's fastest growing population
- Area of 1,730,648km², 7X the UK
- Capital City – Brisbane (2 million)
- Liveable climate, large tourism industry - “Resort Express” flights to Queensland, resource sector, agriculture



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3. How we got started in providing workshops

- Initial evidence-based practice in public health and health promotion for managers & policy makers workshop (March 2005)
- Agreement reached on need for application and training.
- ?Coordination, ?Provider, ?Timeframe
- HS & Epi identified as key leader for EBPH training in population health
- **Central Area**, took lead role
- HS & Epi developed 2 day workshop with the **Cochrane Health Promotion & Public Health Field**
- Each workshop to train a new co-facilitator

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4. Workshop description

- Two day workshop
- Pre-readings as an introduction to the concepts
- Power point presentations, individual and group exercises, hands on literature searching using OVID Medline
- Emphasises resources staff have presently available in workplace.
- Workbook and tools to take home



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Workshop components

- Background to Evidence-based practice (Sicily Statement)
- Types of information derived from research
- Formulating a research question
- Searching for the evidence
- Principles of critical appraisal
- Interpretation of results
- Integration of evidence into practice
- Evaluating your effectiveness



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Evidence-based process

1. Ask an answerable question
2. Find the evidence to answer that question
3. Critically appraise the evidence
4. Integrate the evidence with your expertise and values of population
5. Evaluate your effectiveness in EBP



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Day 1: Morning - background

- Evidence-based practice
- Types of information derived from research
 - Presentation
 - Exploration exercise with different types of papers to solve a problem
 - Uses
- Research methods (systematic reviews, quantitative studies, qualitative studies)
- Types of reviews



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Day 1: Afternoon

- Formulating an answerable question (presentation plus DIY)
- Principles for searching for evidence
- Practical Session – searching for evidence (worked example, then DIY)



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Day 2: Morning

- Principles of Critical Appraisal,
 - *Quantitative* studies
 - *Qualitative* appraisal of a process evaluation exercise
- Interpreting findings
- Applicability of studies (RE-AIM)



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Day 2: Afternoon

- Applicability of studies (RE-AIM)
- Critical Appraisal of a systematic review (discipline specific)
- Evaluating your effectiveness
- Where to from here
- Evaluation and close



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End of workshop evaluation (1)

Evaluation form

- Used to improve structure and content of subsequent workshops (e.g.):
 - Slides and exercises updated
 - Material selected to reflect work focus of participants
 - Physical activity breaks
- Summarised for report

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End-of workshop evaluation (1)

- Analysis of the first 6 workshops, each subsequent workshop analysed



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End-of Workshop evaluation (1)

Relevance to main area of work:

- > 77% participants reported workshops *mostly or completely relevant*
- 9% reported material *totally irrelevant* to main area of work.

Finding:

- The content of the workshop is relevant to the participants work areas
- Application: Further discipline specific examples have been included to make the exercises more relevant



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Workshop evaluation (1)

First six workshops presented between May 05-April 06

- 79 persons completed the workshops
- 6 co-presenters trained
- Variety of work disciplines represented:

	Frequency	Percent
Health surveillance & epi	3	3.8
Population health nutrition	6	7.6
Community health	7	8.9
Communicable diseases	8	10.1
Environmental health	13	16.5
Health promotion	42	53.2
Total	79	100.0

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End-of Workshop Evaluation (1)

Comprehension of material

- 20.3% reported *I understood some of it*
- 60.6% reported *I understood most of it*

Finding:

- Course material suitably pitched at an appropriate level for comprehension by the intended audience

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End-of Workshop Evaluation (1)

Value of workshop:

- Broadened my thinking about the topic 77%
- Confirmed knowledge I already had 34%
- Gained confidence to practice EBPH 76%
- Learned things that will inform my practice 84%

Finding:

- Workshops valued by participants



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End-of Workshop Evaluation (1)

Competency level in practising EBPH

- 18% (n=14) reported very good competency
- 75% (n=59) reported fair to good competency

Finding:

- Need to provide further EBPH training and support



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End-of Workshop Evaluation (1)

Overall workshop rating:

- 65% participants reported workshops very good or excellent

Performance of facilitators:

- 69% participants reported facilitators very good or excellent

Finding:

- Workshops are presented to quality standards by competent facilitators



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End-of Workshop Evaluation (1)

Recommendations:

- Continue workshops
- Continue end-of workshop evaluation
- Provide follow-up support
- Charge modest cost (value and re-invest)
- Acknowledge high level of support from team leaders



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Follow-up Evaluation (2)

To determine:

- use of EBP before & after attending workshop
- use of components of workshop
- barriers to using EBP
- activities to refresh knowledge and increase practice of EBP in the workforce



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Follow-up Evaluation (2)

Methods:

- Questionnaire developed and emailed to the 66 participants of first five EBPH workshops
- Time elapsed between workshop attendance and questionnaire between two and eleven months.



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Follow-up Evaluation (2)

Results

- Forty responses received (61%)
- Response not related to time elapsed since workshop attendance
- Staff movement reduced response rate



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Follow-up Evaluation (2)

Work discipline of respondents

- All disciplines represented
- Survey response varied with work discipline
- More than 50% from health promotion

Discipline of participants	Workshop participants	Respondents to follow up survey	Response (Percent)
Community health	4	4	100.0
Population health nutrition	5	3	60.0
Communicable diseases	7	5	71.4
Environmental health	12	7	58.3
Health promotion	38	21	55.3
Total	66	40	60.6



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Follow-up Evaluation (2)

Reasons for attending the workshop

To learn more about:

- Evidence based public health 73%
- How to search for evidence 52%
- How to review evidence 40%
- Supervisor encouraged them to attend 42%

Finding:

- Respondents keen to learn practical aspects of EBP, supervisors supportive of workshops.



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Follow-up Evaluation (2)

Use of evidence based practice before the workshop

- 62% reported they had used EBP

Components of EBP used before the workshop:

- Accessing a variety of information derived from research 80%
- Formulating PICO questions 20%
- Methodically searching for evidence 32%
- Critical appraisal 32%
- Interpreting results of a systematic search of the literature 24%
- Integrating evidence into practice 76%
- Evaluating your effectiveness 48%



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Follow-up Evaluation (2)

Since attending:

- 68% reported yes
- Seven that previously were not using EBP practice before the workshop now reported they were
- Five that had reported they were using EBP now reported they were not using EBP

Finding:

- Further work may be required for participants to embrace EBP in their practice



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Follow-up Evaluation (2)

- Unfocused questions, poor searching, little consideration for quality, not
- BUT integrating into practice

Respondents believed they were using EBP before attending workshops but not using specific EBP techniques

eg formulating PICO questions or methodically searching for evidence



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Follow-up Evaluation (2)

- Reported increases by users in the components
-But integrating evidence into practice dropped by nearly 50%

Possibly a good thing?



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Follow-up Evaluation (2)

Use of components of the EBPH workshop

- Preparing or commenting on concept briefs/project plans
- To reply to client queries
- Evaluation of projects
- Business planning
- Writing programs presentations
- Defining evidence base/critically appraising literature
- Workshop presentation preparation



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Follow-up Evaluation (2)

Barriers to using skills and information covered in workshop

- I do not have time to search for or read literature
- I do not feel confident to use it
- I do not understand the concepts
- It is not relevant to my work
- Findings:
- Participants need to make time to search for evidence
- Follow up training would be beneficial to improve confidence of the concepts of EBP



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Follow-up Evaluation (2)

Relevance of workshop to needs

- Over 62% (n=25) reported the workshops were mostly or completely relevant to their needs.
- Only 1 respondent (2.5%) reported that the training was irrelevant.

Findings:

- Workshops are relevant to population health staff



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Follow-up Evaluation (2)

What would assist you to use the skills and information covered in the workshop?

- Assistance with statistical concepts 32%
- **Phone support or guidance** 48%
- A journal club 20%
- A follow up workshop 33%

Suggested topics for workshops:

- More experience in searching for data
- Advanced searching techniques
- Critical appraisal
- Project evaluation
- Data analysis



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Follow-up Evaluation (2)

Further areas of skill development important to enhance value of workshop

- Turning evidence into practice 65%
- Statistical concepts 30%
- A refresher course on EBPH 33%
- Critical appraisals 28%
- Health inequalities 12%
(n=5)



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Follow-up Evaluation Recommendations

That the Health Surveillance and Epidemiology team:

- Continue to provide the EBPH workshop and to continue to update the course to keep it current.
- Continue the follow up survey.
- To provide ad hoc phone support (e.g. adoc phone support).
- To develop and provide a short refresher EBPH workshop concentrating on the practical skills of searching for evidence, updates of the Cochrane Library and explaining statistical concepts.



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Follow-up Evaluation (2)

- Knowledge translation workshop.
- To support the EBPH clubs and interest groups which develop.
- Continue partnerships with the other disciplines
- Secure new funding, and
- Continue the collaboration with the Cochrane Health Promotion and Public Health Field and others working internationally in evidence-informed population health.



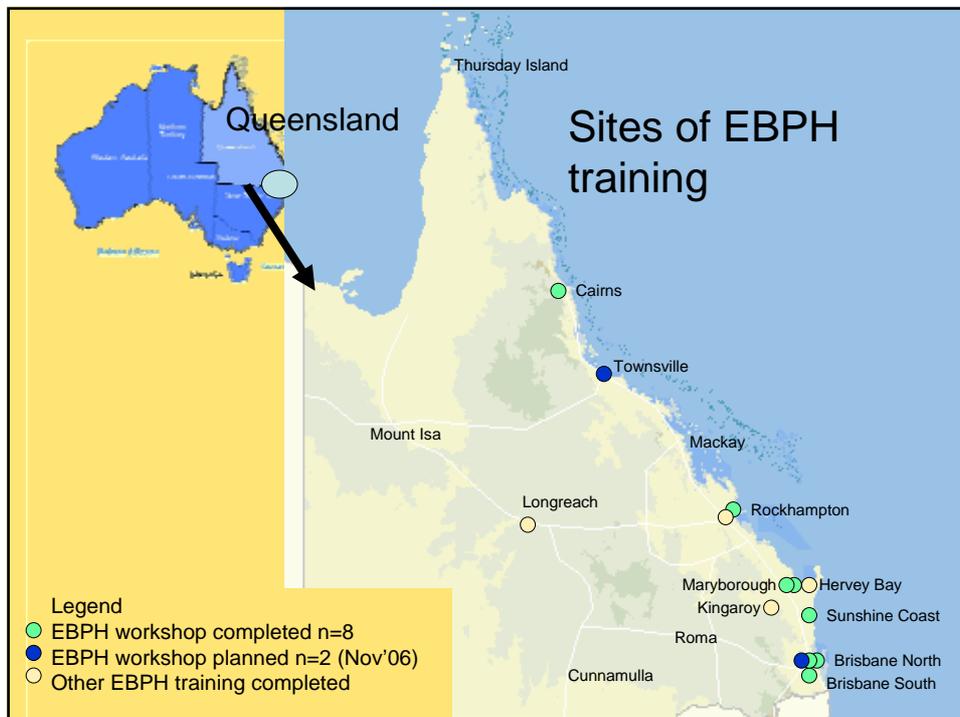
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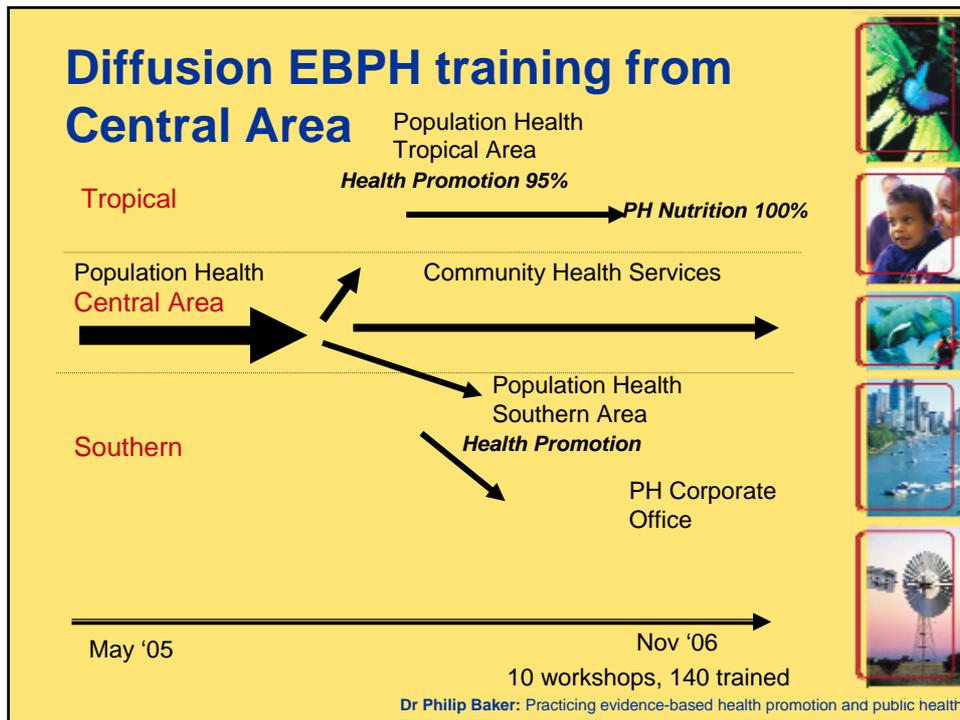
Present challenges

- Suitable venues
- Getting learning into practice, systems changed
- Sustaining training
- Adequate staff to support those wanting to use evidence
- Need examples to show its impact upon health status of the population
- Some folks less interested
- Other Areas, Corporate Office



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What have we learned?

Start with the training wheels on



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What have we learned?

There are swings and roundabouts



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Why has it worked?

- Built workshops with the workforce being trained (avoid totally external training)
- Train co-facilitators
- Use relevant examples (tailor examples)
- Be prepared to revise the training
- Have physical activity breaks
- Healthy catering
- Location away from workplace
- ? Charge – (free initially)



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Come visit us in Queensland



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Further information:

- Philip_baker@health.qld.gov.au

Disclaimer:

For education and research purposes only. The opinions expressed are those of the participants and not necessary those of Queensland Health nor are they official Queensland Health policy.



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What are the barriers and facilitators for you?

- What kind of **content** needs to be covered in training about systematic reviews?
- What **skills** need to be developed through training?
- What other barriers or facilitators influence how you use research evidence in your work?



(60)

Summary

(61)



Conclusions

Evidence-informed health promotion needs a sound understanding of both:

- **Evaluation research methods** (encapsulated by critical appraisal skills); and
- The **challenges and practicalities** faced by health promotion specialists and the populations they serve.

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Contact details

Email: r.rees@ioe.ac.uk g.brunton@ioe.ac.uk

Eppi-Centre, SSRU
18 Woburn Square
London, WC1H 0NR

<http://eppi.ioe.ac.uk>



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Evaluations please



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