Evaluation in primary health care

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Outline
- What is primary health care?
- What is evaluation?
- What is the difference between evaluation and research?
- Evaluation in the primary health care context
- An example for midwives
- Take away messages
- Resources

Primary health care
- Primary Health Care seeks to extend the first level of the health system from sick care to the development of health. It seeks to protect and promote the health of defined communities and to address individual and population health problems at an early stage. Primary health care services involve continuity of care, health promotion and education, integration of prevention with sick care, a concern for population as well as individual health, community involvement and the use of appropriate technology.

(Commonwealth Health Ministers’ Council 1988; DH&FS 1998)

Evaluation
- About assessing the value or worth of something compared with a standard or criterion (Hawe, Degeling & Hall, 1995)
- Uses similar methods of observation and measurement to research
- An essential component of quality improvement in health care
- Quality improvement provides a framework for monitoring and improving performance by systematically reviewing care provided or outcomes achieved against explicit criteria

(PHReNetSouth, 2002)

Research
- Systematic investigation towards increasing the sum of knowledge
- Disciplined pursuit of discovery and understanding that leads to generalisable theory and methods
- Contributes to understanding of how the world works
- Research aims to produce objectively verifiable information

Standards for evaluation
- Utility
  - Serve the information needs of intended users
- Feasibility
  - Realistic, prudent, diplomatic, frugal
- Propriety
  - Legal, ethical, with due regard for all
- Accuracy
  - Reveal and convey technically adequate information about features which determine worth or merit of program being evaluated

(Joint Committee on Standards, 1994)
Standards for research

- **Validity**
  - Extent to which instruments used accurately measure what they are supposed to measure
- **Reliability**
  - Instruments measure consistently
- **Causality**
  - Whether outcome can be attributed to a cause
- **Generalisability**
  - Extent to which results apply to other populations and settings

Purposes of evaluation

- **Three common evaluation purposes**
  - To find out how well a program is working so it can be improved or refined
  - To find out if a program met its stated objectives
  - To add to knowledge about a situation
- **Perspectives**
  - Funders
  - Providers
  - Receivers
  - *Perspectives of all key stakeholders are important

Prospective Evaluation

- **Prospective evaluation**
  - Designed before program is implemented
  - Greater number of evaluation approaches can be considered
  - More freedom to specify information evaluators want to collect about the program
  - Ensure information is collected

  *(Grembowski 2001)*

Evaluation scenario 1

- Evaluation planned at time of program development
- Program theory of action developed between all stakeholders
- Relevant information collected by program staff
- Opportunities for learning by program staff and funding organisation from start of program

Retrospective evaluation

Choice of design and availability of information are compromised, and limit what can be learned

Controlled design not possible

Historical information may /may not exist

be useful in answering key questions

Evaluation scenario 2:

- Limited time to commission and conduct retrospective evaluation of health program to satisfy contractual arrangements
- Unlikely to be useful in decision-making
- No program theory developed
- Relevant information not available
Levels of health program evaluation

- Health programs
  - At this level, the performance of programs developed to reduce or eliminate a health problem or achieve a specific health objective is evaluated
- Health care system
  - Performance of a system, which has structure which influences process and outcomes, can be evaluated for effectiveness in dealing with particular patient groups.
- Health services
  - Cost effectiveness of specific health services provided to patients in the system

Evaluation in primary health care

- PHC setting is complex
  - Providers
  - Settings
  - People who use the services
- Purpose
  - To produce information about the performance of a program or intervention in achieving its objectives
  - 2 fundamental questions
    - Is the program working as expected?
    - Why is it working as expected?

*Perspectives of all key stakeholders are important

Evaluation in PHC

- Formative
  - During the program
  - Assess program implementation
  - Refine, modify or improve delivery of program or activity
  - To ensure program is being received by target population
  - Target population is satisfied

- Summative or impact (relates to objectives)
  - When program has finished
  - Have program objectives been achieved?
  - Contributes to decisions about future of program and its directions
  - Outcome (relates to goals)
    - Has the program achieved its goals?
  - For knowledge generation

Program pyramid

- Aim or goal
- Objectives
- Strategies

Questions and methodologies

<table>
<thead>
<tr>
<th>Question</th>
<th>Type of Evaluation</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did the program succeed in achieving its aim?</td>
<td>Outcome</td>
<td>Classic experimental method</td>
</tr>
<tr>
<td>Did the program succeed in achieving its objectives?</td>
<td>Summative or impact</td>
<td>Experimental, quasi-experimental, quantitative and qualitative methods</td>
</tr>
<tr>
<td>Was the program implemented as intended?</td>
<td>Formative or process</td>
<td>Quantitative and qualitative methods</td>
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</tbody>
</table>
Reasons for program success or failure

<table>
<thead>
<tr>
<th>Theory of program cause and effect</th>
<th>Sound</th>
<th>Faulty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sound</td>
<td>1 program success</td>
<td>2 causal logic problem</td>
</tr>
<tr>
<td>Faulty</td>
<td>3 implementation problem</td>
<td>4 program failure</td>
</tr>
</tbody>
</table>

Program theory links means and ends

- Program logic is a theory about the causal linkages amongst program components: resources, activities, outputs, short term and long term outcomes.
- Program theory is testable and should be tested.
- Making the theory of action explicit is the first step in testing its validity.

Methodologies

- **Quantitative**
  - Classical and quasi-experimental
  - RCTs, CCTs, quantitative methods of collection and analysis
  - Work best for relatively simple clinical interventions
  - No information on why a program did or did not work; qualitative study accompanying experimental study may provide answers

- **Economic evaluation**
  - Should include all costs to all stakeholders
  - Is essential for policy makers
  - Random allocation can mask important information about what works, for whom, in what circumstances, and why

- **Mixed methods designs**
  - Use quantitative and qualitative data collection methods and analyses
  - Most suitable for socially complex interventions or situations, such as those often undertaken in primary health care

Methodologies

- **Qualitative data collection and analysis**
  - Required for detailed information on why a program did or did not work
  - Can be used in conjunction with quantitative, experimental designs
**Approaches to evaluation**

- Utilisation focussed evaluation
  - Evaluation done for and with specific, intended primary users for specific, intended uses (Patton 1997)
  - Highly personal and situational
- Realistic evaluation
  - What works, for whom, in what circumstances, and why
  - In practice, quite difficult to undertake

**Bennett’s hierarchy: a simple model for evaluating and communicating project results**

- Model has been tried and tested in agricultural extension for more than 20 years
- Focuses on outcomes in planning, implementing and evaluating programs
- Integrates program evaluation with program development
- Bennett’s hierarchy is the basis of Targeting Outcomes of Programs (TOP)
  [http://deal.uni.edu/TOP/](http://deal.uni.edu/TOP/)

**An example for midwives: Program pyramid**

- Aim or goal
- Objectives
- Strategies

**Plan, Do, Study, Act (PDSA)**

- I want to design a program to educate my clients about childbirth – **Plan** what it is you want to do. Think about how you expect it will work.
- Undertake the program – **Do**
- Did I achieve what I wanted to achieve? Ask. **Study** the results
- I have learned about what I achieved. I shall change my program for my next group of clients – **Act** on the results
- PDSA is a continuous cycle of quality improvement

**PDSA cycle diagram**

- **PLAN**
- **DO**
- **STUDY**
- **ACT**

**Take away messages..**

- Evaluation should be built into program planning.
- No one evaluation method is perfect.
- Prospective evaluations enable the selection of the most appropriate methods, collection of baseline measurements, and use of process evaluation findings to improve and refine interventions.
Take away messages..

- The perspectives of all key stakeholders need to be included in the evaluation.

Resources

- PHC RIS website
  http://www.phcris.org/resources/research/evaluation_frameset.html
- TOP http://citnews.unl.edu/TOP
- Hawe, Degeling & Hall (1990) Evaluating Health Promotion: a health worker's guide; Sydney, MacLennan & Petty Pty Ltd.

When is evaluation not political?

- No one cares about the program
- No one knows about the program
- No money is at stake
- No power or authority is at stake
- No one in the program, making decisions about the program, or otherwise involved in, knowledgeable about, or attached to the program, is sexually active.
  (Patton 1997)