Evidence Based Practice: A Constructive Critique with Particular Reference to Social and Community Health Services.

Mark Burton

Research Institute for Health and Social Change:
Professional Practice and Research Development Centre

Manchester Learning Disability Partnership

‘The Evidence Based Orthodoxy’ or ‘*ebo*’.

‘Evidence’ chiefly means research on the relationship between practices (processes) and outcomes.

Practitioners should do things that are known to be effective, and cease doing things that are known to be ineffective.

Commissioning or funding should be based on similar considerations

ebo developed within a societal context

- public and governmental pressure for accountability
- challenges to public confidence in service provision.
- supposed cost pressures on health and welfare spending

So the idea of discarding ineffective practices becomes attractive.

This talk

ebo is a worthy Idea
But marred by a simplistic implicit account of:

- The production of knowledge
- Its dissemination
- The use of knowledge in the field

As a result *ebo* has limited immediate relevance.

But there is a kernel of good sense in the *ebo*, so might the idea of evidence based practice be reframed to take into account the realities of service provision in the community?

A definition:

...the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients. … integrating individual clinical expertise with the best available external clinical evidence from systematic research.

Centre for Evidence Based Medicine, 2000, after Sackett et al., 1996

Dilemmas in Service Provision

ebo addresses the problem of real dilemmas,e.g.:

- Should we use aromatherapy and massage?
- What therapeutic interventions and accommodation support would be appropriate for a man who presents risks to others because of his behaviours?
- Should we train occupational therapists in sensory integration?
- Is it worth giving the parents of adults advice on behaviour management?
- What causes should be considered in a case of severe self injury? What would be an effective intervention?

- Making the right or wrong decision has implications for wellbeing.

- Making the wrong decision could lead to a considerable waste of resources.

- Therefore, the existence of evidence to base decisions on would seem desirable.

- One element in a decision that was ethically competent: the ethical principle of feasibility (Dussel).

But

- The idealisation of the production, dissemination, and use of evidence in *ebo* misrepresents the complexities involved.

And

- It suggests a rational (empiricist) model for decision making that is misleading.

Knowledge Production

1. The problems of doing research in a social context, and the typical strategies taken to deal with these problems.

- Complexity and the strategy of simplification.

2. A mismatch between the models of causation that underpin health and social service practice on the one hand and the dominant style of research on the effects of treatment on the other.

- *Generative* versus *associationist* models.

Knowledge Production

3. Biases (funding, fashion, researcher interest, and difficulty of the necessary investigations) that determine what is researched and what is not.

- For much of the work carried out in community health and social services there is no 'evidence base'.

Dissemination and availability of research findings

Most research-based literature is not accessible to practitioners

- system of priorities and incentives for academic favour publication in technical journals rather than in practitioner-friendly forms
- access to the large collections of books and journals at universities is likely to be difficult and costly.

The use of knowledge in day to day practice in the field

Given access to research findings, what are the prospects for them to influence practice?

To make sense of the task of increasing the influence of evidence on practice requires an understanding of the nature of practitioner decision-making in real everyday practice.

The use of knowledge in day to day practice in the field:

The context of practice

Community health and social services are characterised by a complex of practical and contextual factors

e.g.

- heterogeneity of the population
- the diversity of practice,
- emphasis on individualisation
- multiple roles of staff
- unpredictable life circumstances
- responsive implementation of treatments.

The use of knowledge in day to day practice:

The context of practice

What does the effective practitioner draw on?

- Experience
- Appraisal of current situation
- Values, attitudes, beliefs
- Theory, which has several levels of explicitness
- Knowledge, from multiple sources (personal, craft, scientific*, local, interpersonal, feedback from people receiving the service).
- Imperatives, (personal, interpersonal, organisational, professional, legal, governmental)
- Judgement

* privileged by *ebo*

The use of knowledge in day to day practice:

The context of practice

A complex interplay between different inputs to the decision - making process, all of which have their own legitimacy.

- It would be naive to think that there is a simple recipe for basing practice on one type of input.

Yet this is just what is offered by the *ebo*:

- an almost insultingly mechanical cookbook model is implied: just follow the expert recommendations.

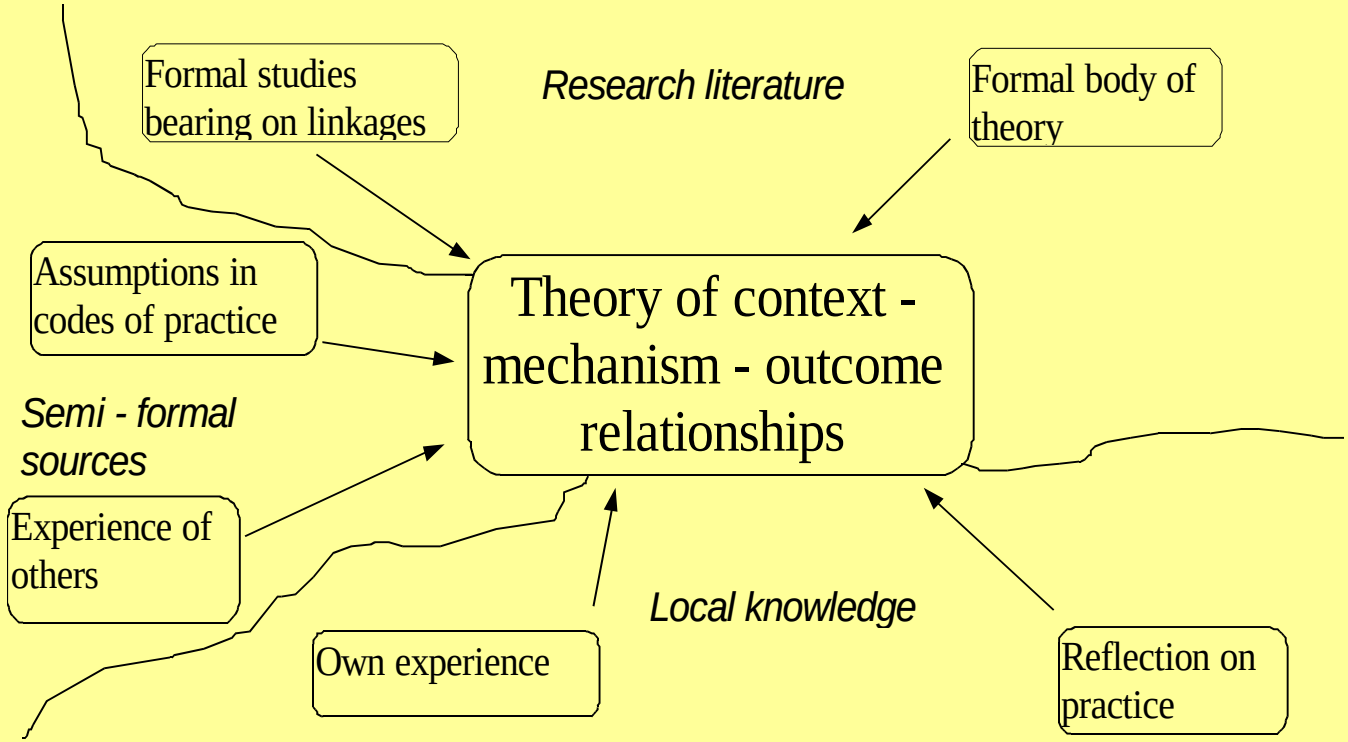
An alternative approach: evidence and practical theory.

If the task is to increase the influence of available evidence on decision making by health and social care practitioners, then, it is necessary to work with an adequate model of what they do in practice.

The practitioner as a theorist:

Most practitioners have some kind of theory of relationship between contexts, participants, practices, causal mechanisms, regularities, and outcomes.

An alternative approach: evidence and practical theory.



An alternative approach: evidence and practical theory.

This theory is more than an intellectual luxury; practitioners' own 'practical theories' make understandable the messy and contradictory realities they face: they 'fill in the gaps'.

Research evidence can
a) Refine and articulate links in such theory, or
b) Suggest an alternative view.

But it will always leave gaps

Evidence that does not engage with these practical theories is likely to have little impact on practice, and hence on outcomes.

An alternative approach: evidence and practical theory.

It may help to consider three levels of evidence:

An alternative approach: evidence and practical theory.

Locally based research projects in Manchester Learning Disability Partnership: the creation of meso to macro level evidence: 1

Screening for urinary infections in a population of adults with severe learning disabilities who are supplied with continence products

Self Injurious Behaviour in adults with learning disabilities

Accessing eye care for adults with learning disabilities

Improving access to dental care and preventive services for adults who are learning disabled.

An alternative approach: evidence and practical theory.

Locally based research projects in Manchester Learning Disability Partnership: the creation of meso to macro level evidence: 2

Impact of targeted 'healthy living co-ordinator' input on body mass index.

Experiences of Adults with Learning Disabilities when Accessing Primary and Secondary Healthcare.

Use of Sensory Integration Therapy with adults who are learning disabled.

Evaluation of the Huddersfield Functional Index as an outcome measure for rebound therapy with adults who are learning disabled.

An alternative approach: evidence and practical theory.

Locally based research projects in Manchester Learning Disability Partnership: the creation of meso to macro level evidence: 3

Review of evidence for the use of hydrotherapy.

Service provision for adults who are learning disabled from Minority Ethnic Groups – commissioners and providers in the North West.

Pilot study to evaluate diabetes screening.

Management of dysphagia (programme of research studies).

Effectiveness of training caregivers of adults with learning disabilities in how to use 20 signs to communicate.

An alternative approach: evidence and practical theory.

Level of evidence	Content of evidence	Use made of evidence
Macro	Neuroleptic medication is ineffective in treating self-injury, except in the short term (Rush and Frances, 2000). However, some self injury responds to certain drugs (Bodfish et al., 1997)	Referral for review, reduction or replacement of current medication.

An alternative approach: evidence and practical theory.

Meso / macro	Local research study (Wisely et al., 2002) finds evidence for association between self-injury sites and acupressure (auto-analgesic) points.	Check for possible sources of pain (teeth, sinuses, etc.), and treatment of underlying cause (e.g. tooth abscess).

An alternative approach: evidence and practical theory.

Micro	Assessment indicates that person is more irritable when noise levels high.	Assessment for auditory hypersensitivity. Reduction of noise levels in person's usual environment. Person taught how to turn down volume on television and audio equipment.
Micro	Evaluation of intervention suggests that exercise is associated with reduction in frequency and intensity of self-injury.	Personal plan includes specific guidance on levels of physical activity, and how to support the person to achieve them.

An alternative approach: evidence and practical theory.

Practical theory

Context:

a) Likely intermittent pain from chronic sinus infection / eustachian tube blockage.

b) Inability to articulate problem, and history of learning that hand biting reduces pain or distracts from pain.

Mechanism:

a) Background pain increases irritability to environmental events.

b) Person uses self-injury to distract / reduce pain, and to interfere with other external stimuli.

c) Inactivity increases congestion.

d) Inactivity increases likelihood of repetitive behaviour that can become self injurious.

An alternative approach: evidence and practical theory.

Outcomes (if no intervention)

a)Continued congestion / intermittent pain.

b)Self injury

c)Inactivity

d)Failure to learn other ways of managing congestion / pain, and environmental stimuli.

Interventions implied

a)Treatment of sinus infection, and management of environment and diet to reduce likelihood of repetition.

b)Introduction of daily walk and use of rowing machine.

c)Person taught how to reduce volume of TV and audio sources, and how to indicate presence of facial / ear pain.

An alternative approach: evidence and practical theory.

So, relatively scant macro level evidence can be supplemented with other information in the construction of a practical (generative) theory, whose predictions are testable through the process of intervention.

Mark Burton and Melanie J Chapman

PROBLEMS OF EVIDENCE BASED PRACTICE IN COMMUNITY BASED SERVICES

Journal of Learning Disabilities, 2004, 8, 56-70.