



Evidence Based Practice

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Learning Outcomes

- Explore the concept of evidence-based practice
- Identify what constitutes academic evidence and how its worth can be evaluated
- Identify sources of evidence i.e. non academic
- Discuss the problems inherent in developing evidence base practice

Evidence Based Practice [EBP]

- What is it?
- Why is it important?
- How does it affect and change patient care?
- What examples of change can we think of in peri-operative care that have been based on evidence?

What is EBP?

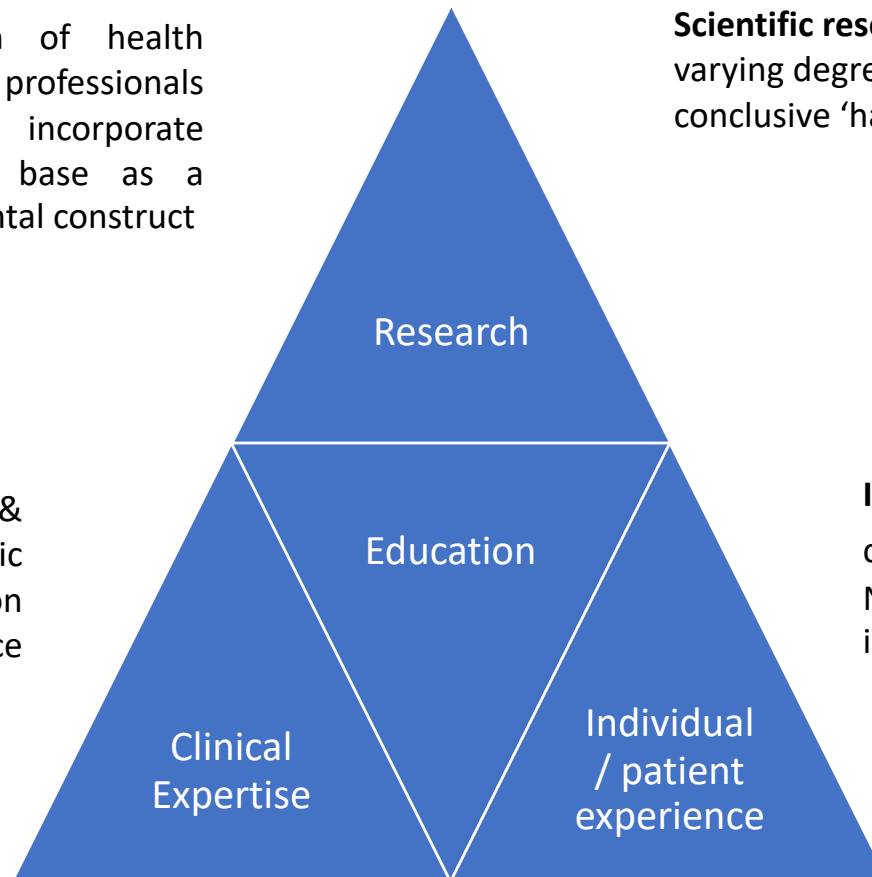
Evidence based health care, including nursing, incorporates research evidence with clinical expertise, the resources available and the views of the patients [Thompson 1998]

Education of health care professionals should incorporate evidence base as a fundamental construct

Scientific research yields varying degrees of conclusive 'hard evidence'

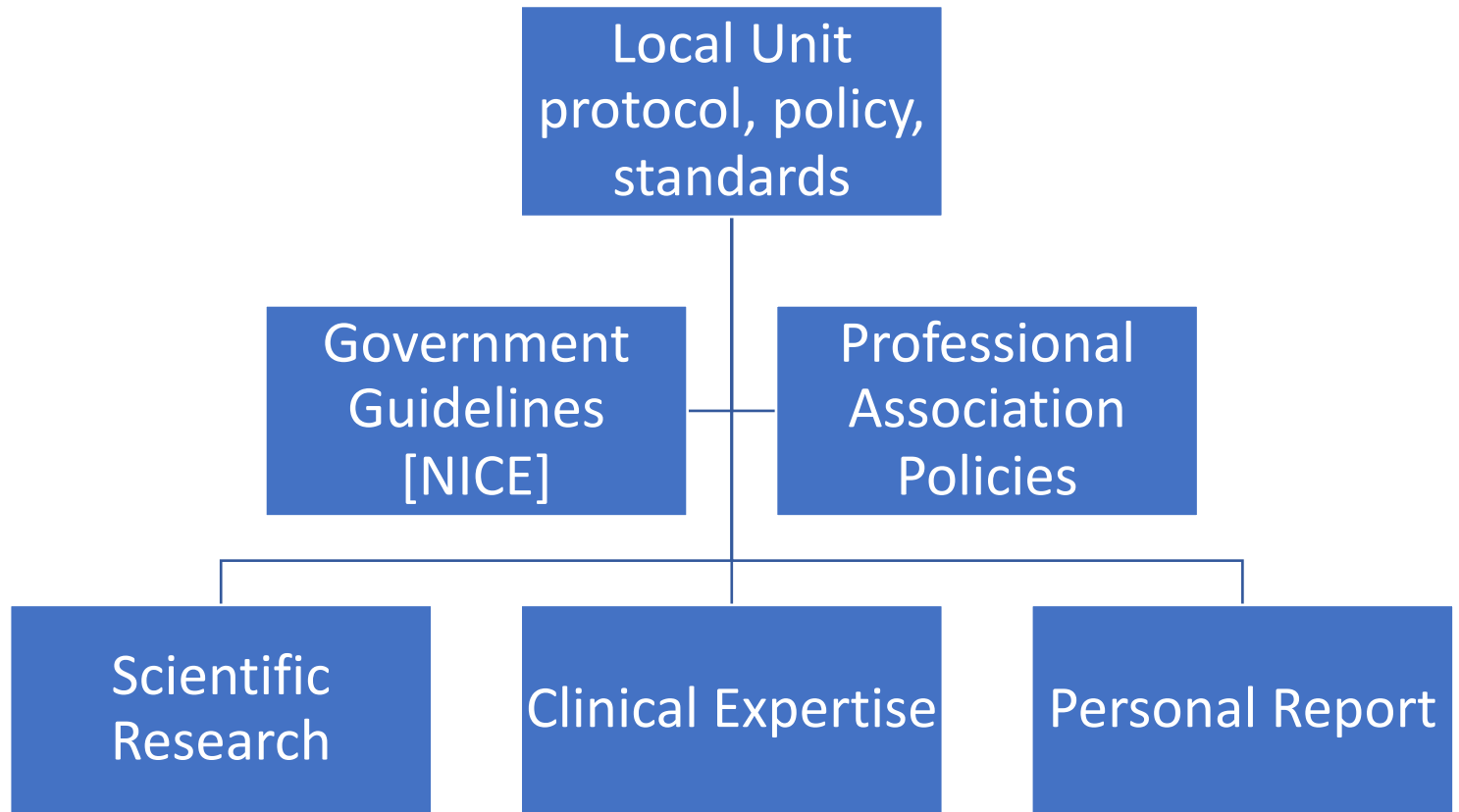
Clinical Expertise & experience yields empiric knowledge based on educated 'guess' in absence of perfect information

Individual report yields conclusive evidence. No-one can refute individual experience



Constituents of EBP

Evidence base is the foundation from which government, professional association policies are developed. Often unit policies are based on evidence presented in this second tier.



NICE is a highly authoritative government institution which presents evidence

National Institute for Health and Care Excellence [NICE]

Hypothermia : prevention and management in adults having surgery - Clinical Guideline published April 2016

- Expert development group
- Clinical expertise
- Review of recent research
- Involvement of patients
- Resources

Available at www.nice.org.uk/guidance/cg65/chapter/Recommendations

Why is EBP important?

Evidence based knowledge is the foundation stone underpinning:

Quality assurance

Clinical governance

Clinical effectiveness

Measurable standards

Audit

Professional accountability

Public expectations

Consequences of not using EBP

Unnecessary interventions

Harm

Neglect

Variations in practice

Waste of resources

How does EBP affect and change patient care?

- Changes ritualistic practice
- Can overrule personal preference
- Standardises practice
- Changes practice which is out of date
- Can influence financial considerations
- Forms the basis of standards, protocols and guidelines

Peri-Anaesthetic Practice

What changes and improvements have been made in practice in your area as a result of using evidence?

What evidence was used?

Relevant – good quality evidence

Evidence from research provides a bedrock for
Evidence Based Practice

Checking the latest scientific findings on any given
area of practice lends authority to that practice

Establishing strong scientific evidence [quantitative
& qualitative research] is essential

Searching for evidence

- Identify the clinical issue, policy or guideline
- Format the search question
- Look for the evidence
- Conduct the literature search
- Select appropriate sources of information

Finding academic evidence

- Searching the scientific literature
- Qualitative and quantitative research trials
- Literature reviews
- Audits
- Surveys
- Expert opinion
- Professional guidelines

Do not use Wikipedia or similar as a source. Perhaps use it to point you towards some of the sources that may be available

The internet – using Google

- Search for articles - evidence in the same way as you would in journals
- Be aware that some of the information you see may be suspect.

Journal articles are peer reviewed, is your internet article from a peer reviewed or professional site? Do not use Wikipedia or similar as a source, but perhaps use to point you towards some of the sources that may be available. Then ask yourself are these sources reliable?! Also, using your professional experience and training does this feel right?

Look for professional websites and material from reputable sources

- Beware and include personal opinion & your direct experience.
- Follow the P.R.O.M.P.T. guideline [in following slides]

Evaluating the academic evidence

How do you know how reliable academic evidence is?

Presentation

Relevance

Objectivity

Method

Provenance

Timeliness

Presentation

Language

Writing style

Structure

Layout

Font

Colour

Relevance

Geographic

Does it relate to countries or areas outside your remit?

Level

Is it too detailed, too specialised, too general or too simple?

Emphasis

Does it contain the kind of information you are seeking?

Objectivity

- Be aware of the **perspective, viewpoint** and **motives** of the author
- Look out for **opinion** presented as fact
- Look out for emotionally charged or vague **language**
- Is there any **sponsorship** involved that may influence the emphasis or the 'evidence'?

Method

Literature review

Clinical trial (RCT)

Experiments

Qualitative study [lived in experience]

Survey : Questionnaire

Case Studies

Audit

Expert opinion

Provenance

The **authors**.

Who they work for, what else have they published?

Organisations involved.

Their work, interests and connections

Publications.

Who is the editor and what is the editorial policy?

Is the work peer reviewed?

Timeliness

- **When** was the information published?

When was the base data produced,
how old are the references, are they still valid?

Does the date **meet requirements**?

Is it the **most recent** information on the subject?

Is it obsolete?

Has it been superseded?

Finding evidence in practice

- Personal experience/reflection
- Credible expert opinion & empiric knowledge
- Critical Incident Analysis
- Local surveys and audits
- Feedback from patients
- Complaints and compliments

What are the difficulties in developing EBP to inform practice?

1. Ensuring that EBP is a foundation to health care professional education
2. Failures in communication
3. Pressure of work
4. Time
5. Attitudes to research and evidence-based practice
Especially if they contradict or change current, established or preferred practice

Difficulty in ensuring EBP is a foundation to health care professional education

- Achieving competency in this area is a complex undertaking that is reflected in disparities between 'best EBP' and actual clinical care
- To advance clinical effectiveness and EBP practice, the Institute of Medicine set a goal that by 2020, 90% of clinical decisions will be supported by accurate, timely and up to date clinical information on best available evidence to achieve best patient outcomes
- While progress has been made, implementation of professional education to facilitate EBP remains an immediate and major challenge.
- The application of EBP continues to be observed irregularly at the point of patient contact.

Lehane E., *et al* [2018] – see reference list]

Failures in Communication

- Poor access to libraries and information sources
- Information overload
- Academic research may be written for and only read by other academics, not practitioners

Time and Pressure

- Pressure of work means that there is little time for professional reading (journal clubs)
- Some practitioners may not have the skills to critically appraise the papers they read
- There is still an emphasis on doing rather than questioning

Attitudes to research and evidence-based practice

- Motivation to change and improve practice cannot be assumed
- Some practitioners may feel threatened by challenges to their practice
- Researchers and practitioners speak different languages
- Recently EBP has been challenged as ‘dehumanising medical reductionism’ [Nicholls 2016]

“What do researchers know? I bet they can’t do the job!”

How can nurses overcome these difficulties?

- Good basic and continuing education
- Time for continuing professional development
- Time to access and assess evidence
- Support from management with resources, encouragement and guidance
- Better communication of research findings
- Healthy regard for EBP valid criticism

Thoughts for the future the role of EBP

- The Covid pandemic has made enormous demands on our health care system.

As a result changes have been made that would have taken a long time or would have been near impossible under normal conditions

- The next few years will be challenging as health care services return to old established ways of working – or new and better systems?
- Financial constraints will be ongoing
- EBP requires time, education, financial resources to develop
- How will we develop EBP in our post pandemic world?

References and further reading

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