

# Evidenced Based Practice (EBP) in Nephrology

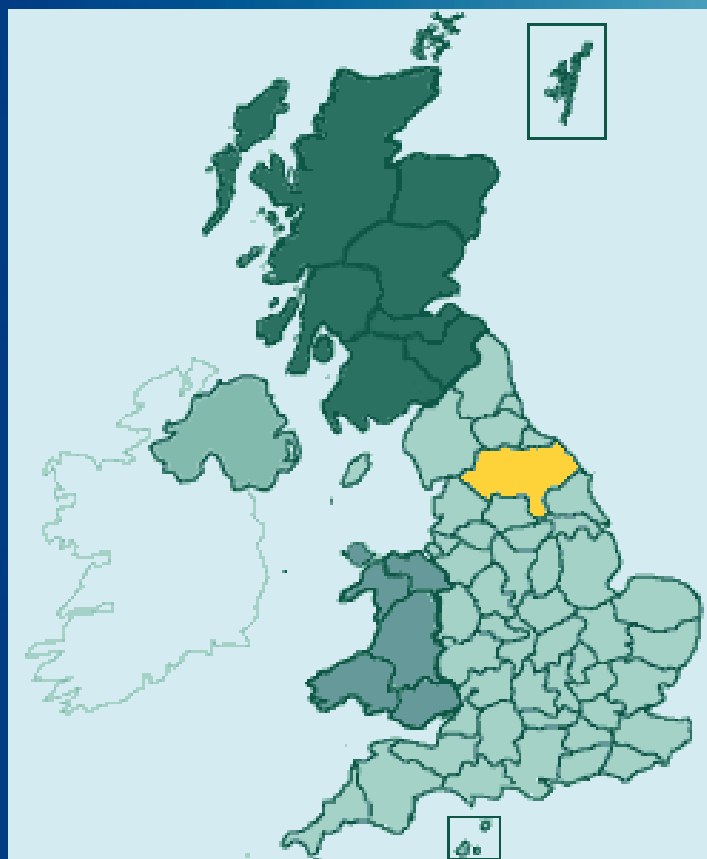
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EDTNA/ERCA**

# בזקָר טוב



**PEAK**  
PROMOTING EXCELLENCE FOR ANAESTHESIA & THE KIDNEY  
**FOR NURSES**









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# Overview of presentation

- ❖ Why EBP is important in Health Care.
- ❖ Simplify the process of EBP – understanding what it means
- ❖ Making EBP a reality – what should be considered.
- ❖ EBP in nephrology care – examples of Nephrology Research

# What is evidence-based health care?



- ❖ EBP is the conscientious use of current best evidence in **making decisions** about the care of individual patients or the delivery of health services.
- ❖ Current best evidence is **up-to-date information** from **relevant, valid research** about the effects of different forms of health care, the potential for harm from exposure to particular agents, the accuracy of diagnostic tests, and the predictive power of prognostic factors.
- ❖ **an approach to decision making** in which the clinician uses the best evidence available, in consultation with the patient, to decide upon the option which suits that patient best.

Sackett, D. L., Rosenberg, W. M. C., Gray, J. A. M, Haynes, R. B., & Richardson, W. S. (1996). Evidence-based practice: what it is and what it isn't. *BMJ* 312, 71-72.

# The Starting Point for EBP

- ❖ Evidence based practice usually begins with an acknowledgement of uncertainty .....identify gaps in knowledge
- ❖ This definition highlights the role of evidence based practice in that it is focused on the best evidence .....inform clinical practice





## Justifications for developing Evidence based Practice skills

- ❖ Developments in treatment approaches, regimes, health care technology ....current growth of the speciality.
- ❖ incidence of renal failure world wide continuos to increase ..... increasing **burden upon** services and resources
- ❖ No longer acceptable that care delivered is based upon routine and rituals
- ❖ Changing population trends and demography

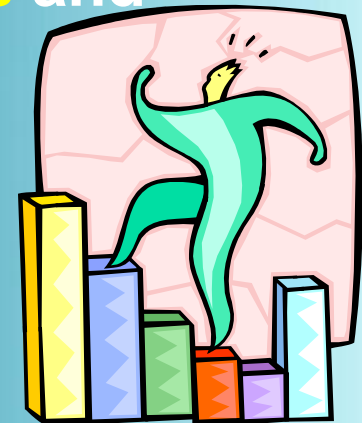


## Demand for EBP-

- ❖ Increased practitioner accountability in clinical decision making
- ❖ Clients have become increasingly knowledgeable of services and care
- ❖ Health services continue to be costly organisations
- ❖ questions concerning **value for money** against health outcomes

# The Benefits of EBP

- ❖ EBP provides the opportunity for to review practice and consider how further improvements or finding the answers to clinical questions can be achieved
- ❖ clinical link is important! - the real impact of EBP **must be on its link to clinical effectiveness** and client outcomes



## **EBP – Its importance**

- ❖ **Health professionals have a duty to ensure practice is based upon sound evidence - seen to be a central feature of clinical decision making**
- ❖ **getting this evidence into practice for it to impact upon patient outcomes remains the challenge.**

# Stages in EBP



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**Convert information into questions**

**Track down best evidence**

**Critically appraise evidence : its validity**

**Apply results to clinical practice**

**Evaluate performance**





**Evidence-based practice**



**Problem presented by patient**



**Gap in knowledge identified**



**Formulation of structured answerable question**



**Search for information (evidence) to answer question**



**Critical appraisal of evidence**



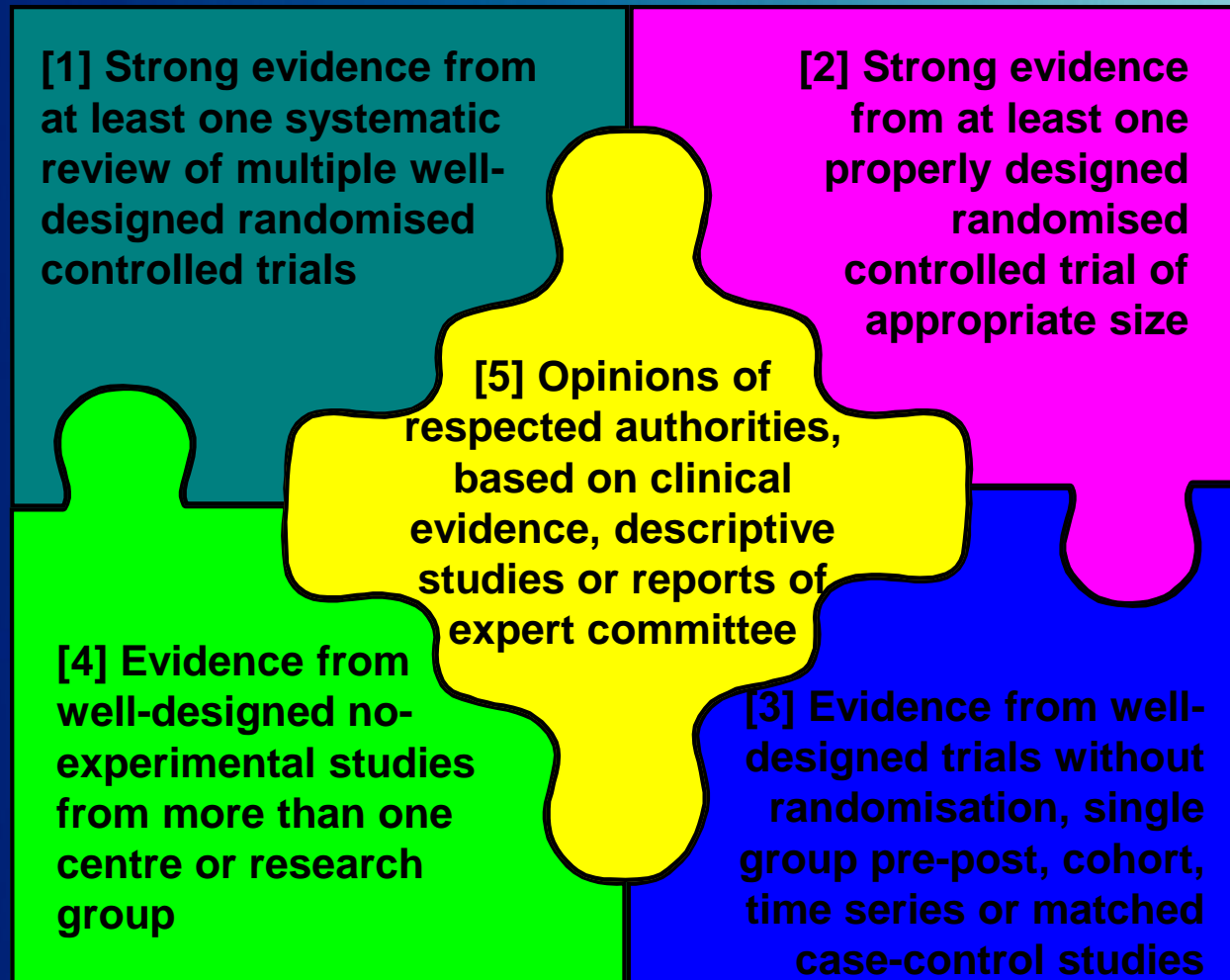
**Evidence applied to patients problem**



**Evaluation of process**



# A hierarchy of evidence used in evidence-based health care (Gray 1988)



# Why does EBP seem such a headache at times?



- ❖ confusion and fear surrounding EBP
- ❖ literature surrounding areas such as research, theory practice gap, managing change
- ❖ Consider the relevance and need for reviewing practice.

## Making EBP Work:

- ❖ Commitment to finding ways to improve practice through applying research findings into practice.
- ❖ health professionals may not possess the skills to critically appraise published research
- ❖ organisational resources needed to promote the development of EBP skills within the team



## Finding the Evidence

- ❖ A wide range of published research currently exists ( +ve & -ve)
- ❖ literature searching skills of those seeking answers to clinical questions
- ❖ Centres of Evidence Based Practice have been established internationally specialist journals and databases now exist
- ❖ Demands from providers of services to ensure that the care provided is best practice in achieving patient outcomes



THE UNIVERSITY *of York*

NHS CENTRE FOR REVIEWS AND DISSEMINATION

# Climate for Evidenced Based Practice



- ❖ **supportive climate exists enabling staff to develop the skills and abilities**
- ❖ **Requires a commitment on the part of the health professional also on the part of health care organisations**
- ❖ **support continuing professional development for staff**
- ❖ **Being clear what the local drive is to implementing EBP & level of organisational commitment?**

# Essential Skills for EBP

- ❖ Research awareness skills are fundamental
- ❖ Critically read and appraise published research
- ❖ The skills in understanding research methodologies in answering appropriate research questions
- ❖ relevance and fittingness of published studies to the immediate local clinical setting.

# Clinical Culture - Making EBP Work



- ❖ attention is required to the organisational climate
- ❖ practice is critically reviewed and practitioners are supported to challenge existing practice
- ❖ difficulties of implementing research into clinical practice identified honestly
- ❖ Nephrology professionals are working under intense pressure – recognise this
- ❖ essential that available sources of well-conducted studies are made available



# Accessing sources of Evidence

- ❖ Increased growth in electronic databases
- ❖ The information technology age has made it easier to access literature
- ❖ A powerful aid in the search for good quality accessible research findings
- ❖ Practitioners need access to reliable and up to date results
- ❖ Feeling of being over-whelmed is often encountered

# Access to appropriate sources of reliable literature



- ❖ Within the UK the NHS introduced the National Electronic Library for health

*National electronic Library for Health*

**NHS**

- ❖ Online databases ..The Cochrane database at the **University of York,**



- ❖ National Centre of Clinical Evidence (**NICE**)

- ❖ Professional organisations have also played their important role in the ongoing development


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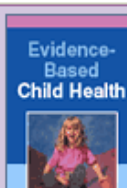
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## Late Referral to Nephrologist

- ❖ cohort study highlighted that inadequate vascular access development was suggested

- ❖ contribute to the burden of the disease experienced by patients.

- ❖ patients referred late to a Nephrologist were 42% more likely to require central venous access for haemodialysis;



## Sources of Evidence

- ❖ **EDTNA/ERCA** clinical practice database (vascular access management, hepatitis B and water treatment )
- ❖ **DOQI outcomes** & guidelines have continued to be an importance reference
- ❖ The Dialysis Outcomes Quality Initiative (DOQI) guidelines provide a number of benchmark standards
- ❖ The **European Guidelines** for Nephrology produced by EDTA



# Application of Evidence Based Practice to Nephrology

- ❖ Cochrane data base review of Nephrology
- ❖ **prospective, controlled crossover study** to evaluate and compare the safety and effectiveness of epoetin omega and epoetin alphas
- ❖ study concluded both epoetin omega and epoetin alfa were effective in correcting anaemia
- ❖ lower doses of epoetin omega were needed to maintain the target haemoglobin
- ❖ Cochrane database of systematic reviews at the University of York, UK provide a range of systematic reviews

## EBP Nephrology - Treatment modalities

- ❖ Review to assess the benefits and harms of CAPD versus hospital or home haemodialysis for adults with ESRD
- ❖ No randomised controlled trials which compared CAPD to hospital or home haemodialysis for adults have been conducted
- ❖ Highlights the apparent existing gaps in published research

## EBP Nephrology - Diabetes Care

- ❖ Increasing prevalence of Diabetes mellitus and impact upon Nephrology services
- ❖ The importance of effective management of blood sugar and hypertension control
- ❖ **Randomised controlled study** of more than 5000 patients in the UK identify the incremental costs of implementing intensive blood pressure and glucose control
- ❖ The finding indicates that policies focused upon improved blood pressure and blood glucose control, are cost effective and affordable

# EBP Nephrology - Family Support / Carers



- ❖ The burden of care ...area where continuing research is required
- ❖ No systematic review of family support as it relates patients with End Stage Renal Failure.
- ❖ Many clinical questions which are best answered through **rigorous and well conducted qualitative** research
- ❖ Qualitative impact of chronic illness upon individuals has been extensively documented
- ❖ Not all published studies could be said to be of high quality in terms of their **methodological rigor**



# EBP Nephrology - Family Support / Carers



- ❖ Australian study which employed **participatory research design** explored the meaning of living with chronic illness
- ❖ Power that 'being normal' holds for individuals with a chronic illness.
- ❖ Further systematic reviews are necessary which can bring together the best evidence

## EBP Nephrology - Dialysis adequacy & QoL

- ❖ QoL as it relates specifically to dialysis adequacy
- ❖ compared quality of life across differing treatment approaches ...very few focusing upon dialysis adequacy alone
- ❖ **single group cross sectional design**, :investigated the relationship between dialysis adequacy and quality of life
- ❖ inadequately dialysed patients were found to have a better quality of life than those patients perceived to be adequately dialysed!!

## Conclusion

- ❖ Understanding characteristics of [EBP]
- ❖ importance of supporting and developing staff in locating, appraising and drawing valid conclusion from studies
- ❖ research findings which can be underpinned by both the professional expertise of the nurse and patient preferences
- ❖ continue to embrace EBP and seek opportunities to apply clinical expertise, which is grounded in high quality evidence from research



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