# **Evidence based practice**

#### concept

- Roots of EBP traced in Florence Nightingale's era
- Concept of health promotion ,prevention of disease and care of sick were central ideas of EBP
- Involves identifying solid research findings and implementing them in nursing practices

# Meaning

- Benefield defines EBP as using best evidence available to guide clinical decision making
- Evidence based practice in nursing -is a process of locating, appraising and applying the best evidence from the nursing and medical literature to improve the quality of clinical nursing practices
- Evidence based nursing is a type of evidence based practice in nursing
- Evidence based nursing (EBN) is a process founded on the collection interpretation and integration of valid, important and applicable research



- Formulating a clear question based on a clinical problem
- Ideas come from two areas
- Problem focused triggers -identified through quality improvement, risk surveillance, benchmarking data, financial data
- May be clinical problems or risk management issues
- Knowledge focused triggers-new research findings that further enhance nursing, or new practice guidelines

- Collaboration
- Brainstorming
- When forming a clinical question include
  - Disorder or disease of patient, intervention or finding being reviewed, comarison intervention, the outcome
- PICO model
- P= who is the patient population?
- I= what if potential Intervention or area of Interest?
- C= is there a Comparison intervention or Control group?
- O=what if the desired Outcome?

Literature review to search for best available evidence

• Clinical studies, integrative literature reviews, metaanalyses, well known and existing EBP guidelines are accessed in literature retrieval process

Analyzing strength and weakness of evidences

- Use rating system to determine quality of research is crucial
- Several rating systems are available
- National guideline clearing house is a database (www.guideline.gov)

Use of best evidences

- After determining internal and external validity of study ,a decision is arrived whether information gathered apply to initial question
- Information should be shared with other nurses

- Evaluating efficacy by
- self reflection, internal or external audit, or peer assessment

#### Purposes of EBP

- Approach which specify the way in which professional should make decisions by identifying evidence that there may be for a practice and rating
- Eliminate unsound or excessively risky practices
- For better patient outcome
- Provide highest quality and most cost efficient nursing care
- Improve quality of nursing care

#### **Barriers in EBP**

- Lack of professional ability to critically appraise research
- Lack of time, workload pressures and competing priorities of patient care
- Lack of knowledge of research methods
- Lack of support from professional colleagues and organizations
- Resistant practice environment
- Resources and evidences
- Lack of continuing education programmes
- Fear of stepping on one's toe's
- Human nature





#### Explanation of Each Stage

• **Star point 1. Discovery** This is the knowledge generating stage. In this stage new knowledge is discovered through the traditional research methodologies and scientific inquiry. Research designs can range from randomized control trials to qualitative studies.

• Star point 2. Evidence Summary Evidence summary is the first unique step in EBP. This is the knowledge generating stage in which research is synthesized into a single meaningful statement. Evidence summaries integrate the results from multiple studies to yield more credible results. Systematic reviews, similar to those found in the Cochrane Database, are considered the highest level of evidence:

• Level I:

Evidence from a systematic review or meta analysis of all relevant randomized control trials (RCTs), or evidence-based clinical practice guideline based on systematic reviews of RCTs

Level II:

Evidence obtained from at least one well-designed RCT

Level III:

Evidence obtained from well-designed controlled trials without randomization Level IV:

Evidence from well-designed case control and cohort studies Level V:

Evidence from systematic reviews of descriptive and qualitative studies

Level VI:

Evidence from a single descriptive or qualitative study

Level VII:

Evidence from the opinion of authorities and/or reports of expert committees(Melnyk & Fineout-Overholt, 2005)

• **Star point 3. Translation** The transformation of evidence summaries into actual practice requires two stages: translation of evidence into practice recommendations and integration into practice. The aim of transformation is to provide useful tools to support care. Recommendations are generically termed clinical practice guidelines and embedded in care standards, protocols and algorithms.

#### • Star point 4. Integration

The integration stage is perhaps the most challenging as this stage involves changing both individual and organizational practices. Changes in practice are adopted and integrated into care. The rate of adoption is dependent upon individual and organizational factors and may require multiple cycles of change over a period of time. The Iowa Model identifies the steps of integrating evidence into practice.

#### • Star point 5. Evaluation

The final stage in knowledge transformation is evaluation of outcomes. The impact of EBP on patient outcomes, provider and patient satisfaction, efficacy, efficiency, and economic analysis are evaluated.

 The steps taken by Florence Nightingale to integrate evidence into practice are very similar to those outlined in the Ace Star Model and Iowa Model of EBP. Providing effective care in today's healthcare system is a complex process. Using a systematic approach to improve patient care can yield effective and reproducible results that are sustained through the test of time. Nursing staff interested in learning how EBP is making an impact on the care provided at Children's Hospital are encouraged to contact members of the Nursing Research Committee.

#### EBP

