**EVIDENCE – BASED PRACTICE**

**Author details**

Prajnya Elinar Digal. Assistant Professor. SUM Nursing College. Siksha ‘O’ Anusandhan (Deemed to be University)

Mail Id: prajnyaelinar91@gmail.com

Contact No: 9439039007

Editor reference Id: IIPER1655891646

**Learning objectives:**

After completion of this topic, the class will be able to

* Define evidence-based practice (EBP)
* Differentiate between evidence-based practice, research, research utilization, and
* quality improvement
* Describe the importance of EBP to nursing practice and high-quality patient care

**Introduction:**

Florence Nightingale started evidence-based practice in the 1850s, during the Crimean War. Evidence-based nursing practice refers to the best recent techniques for delivering high-quality care that are supported by the most reliable research. EBP encourages medical staff to give patients high-quality care.

**Meaning of Evidence based practice:-**

Reviewing, analyzing, and translating the most recent scientific data is done through the EBP process.

**Definition of evidence based medicine:-**

 “The conscientious, explicit, and judicious use of the current best evidence in making decisions about the care of individual patients” . (Sackett et al..)

**Defining Research:** Research essentially is a problem solving process, a systematic, intensive study directed towards full scientific knowledge of subject studies**.** (Ruth M. French,1968)

**Evidence-based practice components**

1. The most reliable facts available.
2. The demands and preferences of consumers of health services.
3. The clinical judgment and nursing knowledge.

**RESEARCH VS EBP:**

EBP is not about conducting research. It is about using research.

**STEPS OF EVIDENCE-BASED PRACTICE:**

**1. Formulating the well-built clinical question:**

Clinical cases frequently present a deluge of information to process. Prior to conducting a successful search of EBP resources, you must decide which specifics are crucial to answering the current question.

The following elements are found in a well-designed clinical question:

• The disorder or illness of the patient

• The review's intervention or findings

• Contrast and intervention (if applicable-not always present)

**The result:**

The abbreviation PICO makes it easier to recall the procedure -

**PICO:**

* **P**atient population
* **I**ntervention
* **C**omparison intervention
* **O**utcome

Consider the following example:

"Does nebulization lessen respiratory distress in preterm newborns more efficiently than ventilation?"

Premature newborns make up the patient population. Nebulization is the intervention; ventilation is the comparison intervention. The goal is to lessen respiratory distress.

**2. Identify and collect the most relevant and best evidence:**

**a) General information resources:** These resources that provide informations about various diseases & clinical questions, like up to-date E-Books.

 **b) Filtered resources**: filtered resources are more acceptable or favourable & helpful, because the literature is previously searched & results are evaluated. It includes databases of systemic reviews, national guidelines etc.

**C) Unfiltered resources**:

 It is less favorable than filtered resources. These are the primary resources which are generally articles that appear in journels. eg: CINAHL(CUMULATIVE INDEX TO NURSING & ALLIED HEALTH LITERATURE provides indexing for more 46,000 journels of nursing and related articles)

**3. Critically appraise the evidence & it’s validity:**

 Are the results valid (as close to the truth as possible)?

**4. Apply the evidence:** If the evidence is valid and clinically relevant, the next step is to apply the evidence in clinical field with clinical expertise, and patient factors.

**5. Evaluate the outcome:** outcomes are may be measured by physiologic condition & psychological condition of the patient.

**The EBP PROCESS:**

**MODELS USED IN EBNP**

**ACE Star Model Of Knowledge Transformation**

As research data moves through numerous cycles, gets supplemented with other information, and is implemented into practise, the Star Model shows various types of knowledge in a relative succession. A framework for methodically implementing evidence-based practise processes is provided by the ACE Star Model. Knowledge transformation is defined as the process by which research findings from primary research results are transformed into effects on health outcomes via EB care. STAGES OF THE TRANSFORMATION OF KNOWLEDGE 1. Discover 2. Summarize the evidence 3. Translate 4. Integrate 5. Evaluate

1. Discovery

This is a knowledge generating stage. In this stage, new knowledge is discovered through the traditional research methodologies and scientific inquiry. Research results are generated through the conduct of a single study. This may be called a primary research study and research designs range from descriptive to co-relational to causal; and from randomized control trials to qualitative. This stage builds the corpus of research about clinical actions.

2. Evidence Summary

 Evidence summary is the first unique step in EBP— the task is to synthesize the corpus of research knowledge into a single, meaningful statement of the state of the knowledge This stage is also considered a knowledge generating stage, which occurs simultaneously with the summarization. Evidence summary produces new knowledge by combining findings from all studies to identify bias and limit chance effects in the conclusions. The systematic methodology also increases reliability and reproducibility of results

3.Translation

Evidence summaries must be translated into practice recommendations and then integrated into practise in order for them to become actual practise. The goal of translation is to give doctors and patients an usable and pertinent package of condensed information in a format that fits the time, cost, and care standard. Clinical practise guidelines (CPGs) are recommendations that can be reflected or included in care standards, clinical pathways, protocols, and algorithms. Research evidence that has been summarised is interpreted, supplemented with information from other sources (such as clinical knowledge and theoretical texts), and then contextualised to the particular client group and location. The relationship between the clinical advice and the strength of the supporting evidence and/or recommendation is explicitly stated in evidence-based CPGs.

4. Inclusion

Due to society's long-standing expectation that healthcare be based on the most recent information, which necessitates the application of innovations, integration is likely the stage of healthcare that is most well-known to patients. In this step, both formal and informal channels are used to modify organisational and individual practises. The main issues that are covered in this stage are those that have an impact on how quickly individuals and organisations absorb innovation and integrate the change into long-lasting systems.

5. Analysis

Evaluation is the last step in the transformation of knowledge. EBP evaluates a wide range of end points and outcomes. These include assessing how well EBP affects patient health outcomes, patient and provider satisfaction, efficacy, efficiency, economic analysis, and impact on health status. The final result of the five stages of knowledge transformation is evidence-based quality improvement in healthcare.

**Utilizing research means:**

For years, nurses have used the research at their disposal to direct their nursing practise and their attempts to

more patient success. In this procedure, research findings were critically analysed, evaluated, and their applicability to clinical practise was determined. Closing the gap between research and practise involves incorporating important research results into clinical practise and assessing the effects of the adjustments.

Evidence-based practise has supplanted research utilisation initiatives in nursing more recently.

**Implications of EBP for nurses**

Evidence-based practise is ensured and provided in large part by nurses. They must constantly inquire into the "greatest achievable outcomes" for the patient, their family, and the nurse, as well as "what is the evidence for this intervention," "How do we deliver best practise," and "Are these the questions we should be asking." Additionally, nurses are in a good position to collaborate with other members of the healthcare team to pinpoint clinical issues and apply the body of evidence to enhance practise. There are numerous chances for nurses to challenge established nursing practises and use data to improve patient care.

**Evidence-based practice is plays an important role:**

Evidence-based nursing practise enables nurses to deliver high-quality patient care based on research and knowledge as opposed to "the way we have always done it" or on the advice of colleagues, out-of-date textbooks, traditions, or hunches.

For instance, should one consult a nursing textbook for the solutions to clinical questions?

**Importance of EBP in nursing practice:**

* Better patient outcomes are achieved as a result of it, and it also advances nursing science and maintains practise up to date and relevant.
* It boosts self-assurance in judgement
* Current policies and practises that take into account the most recent research support

**IMPACT OF EVIDENCE BASED PRACTICE IN NURSING:**

**I)INFORMATION EXPLITION**: EBP provides a systematic, structured information which can be applied in clinical setting relevant to patient care.

**ii)EFFICIENCY**: Evidence-based practice increases the efficiency of nurses & helps in making decision based on knowledge.

**iii)BETTER PATIENT OUTCOME**: The patient will likely experience a better outcome when the decision is correct by using the evidences.

 **iv)IT KEEPS NURSING PRACTICE CURRENT**: evidence-based practice is based on new discoveries.

**vi) VARIATION IN PRACTICE**: Through evidence-based practice a nurse can use different techniques & tools in clinical setting.

**vii)QUALITY CARE**: Using Evidence based practice promote nurses to provide quality care to the patients.

 **Barriers to implementing evidence-based practice:**

The obstacles that keep nurses from applying research to their daily work.

**Nurses often report the following:**

Lack of administrative support; lack of knowledgeable mentors; insufficient time for research; lack of understanding of the research process; lack of value for research in practise; difficulty in changing practise; lack of value for research in practise; lack of awareness of research or evidence-based practise

Lack of accessibility to research reports and articles; difficulty accessing research reports and articles; lack of free time to read research; complexity of research reports; ignorance of EBP and article critique; feeling overwhelmed by the process.

**Tips to overcome barriers:**

Utilizing research evidence is a skill that any nurse can develop:

* Read widely and critically: Nurses who are responsible for their profession should read journals that are related to their field of expertise, including the research findings in them.
* Attending conferences offers the chance to network with scholars and consider their implications for practice.
* Acquire the expectation that a procedure will be supported by evidence of its efficacy. Nurses should expect that the clinical judgments they make will be supported by solid evidence.
* Participate in a journal club: Many companies that employ nurses support groups that gather to discuss studies that might be useful for practice.

**CONCLUSION**

Evidence-based practice has been developed to help nurses move evidence into practice. Use of these evidences prevents incomplete interventions for better patent outcome.

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